

**ORIGINAL**

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

Before The Honorable YVONNE GONZALEZ ROGERS, Judge

EPIC GAMES, INC.,	)	<b>Evidentiary Hearing</b>
	)	
Plaintiff,	)	<b>Volume 2</b>
	)	
vs.	)	NO. C 20-05640 YGR
	)	
APPLE, INC.,	)	Pages 232 - 407
	)	
Defendant.	)	Oakland, California
_____	)	Friday, May 10, 2024

**REPORTER'S TRANSCRIPT OF PROCEEDINGS**

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(Appearances continued next page)

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I N D E X

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Friday, May 10, 2024

11:58 a.m.

P R O C E E D I N G S

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**THE CLERK:** Good morning, everyone. These proceedings are being court-reported by this Court. Any other recording of this proceeding, either by video, audio, including screenshots or other copying of the hearing is strictly prohibited.

Your Honor, now calling the civil matter 20-cv-5640-YGR, Epic Games, Incorporated versus Apple, Incorporated.

Parties please step forward, state your appearances for the record.

**THE COURT:** Mr. Bornstein, welcome back.

**MR. BORNSTEIN:** Thank you, Your Honor. I think it's now good afternoon.

**THE COURT:** No, I still have two minutes.

**MR. BORNSTEIN:** All right. Good morning, Your Honor. I'm joined today at counsel table by Yonatan Even, Benjamin Wylly. In the gallery is Brent Byars, Michael Zaken, and Lauren Moskowitz.

**MS. MOSKOWITZ:** Good morning, Your Honor.

**THE COURT:** Good morning.

Okay. Mr. Perry.

**MR. PERRY:** Good morning, Your Honor.

**THE COURT:** Good morning.

1           **MR. PERRY:** I'm joined today at counsel table by Josh  
2           Wesneski; Cynthia Richman; Jason Lowe; and Richard Doren,  
3           counsel for Apple. We may swap out Mr. Pinkert, Mark Pinkert,  
4           halfway through. And our corporate representative from Apple,  
5           Mr. Phil Schiller; and Apple's head of litigation, Heather  
6           Grenier.

7           **THE COURT:** Okay. Still good morning.

8           **MR. PERRY:** Good morning.

9           **THE COURT:** All right. I understand there's going --  
10          or there were discussions among you to change the witness  
11          presentation; is that right?

12          **MR. BORNSTEIN:** That's correct, Your Honor. We've  
13          conferred because of scheduling constraints on some of the  
14          witnesses. So subject to the Court's approval, after  
15          Mr. Roman, who's mid-testimony now, we have our expert,  
16          Mr. Barnes.

17          And it is our understanding based on the pretrial order in  
18          this matter, Your Honor, that the witness exclusion rule  
19          should not apply to Mr. Barnes as an expert. We discussed  
20          that with Apple who had no objection. So unless the Court has  
21          any concerns, Mr. Barnes will be present for the testimony  
22          today.

23          **THE COURT:** That's fine.

24          **MR. BORNSTEIN:** And after Mr. Barnes, we have  
25          Mr. Oliver of Apple.

1 And if by some miracle we get through all that, we can't  
2 have Mr. Schiller because of our agreement with Apple not to  
3 hang him over the week, but so that we don't have any dead  
4 air, we would then go ahead to Mr. Simon.

5 **THE COURT:** Okay. That's fine.

6 So we will go -- it's noon. We'll go until 4:30 today. I  
7 understand that they're doing a system upgrade, and if we are  
8 not done, then it -- none of this will be recorded, we may  
9 have mics, I don't know if we'll have lights.

10 The other thing is given security protocols, if I don't  
11 have you out of here by 5:00, you'll have to go in a very  
12 roundabout way to get out of the courthouse building. So  
13 we'll finish by 4:30. Everybody has to be out of the building  
14 before 5:00 o'clock. So if we go a few minutes over, that's  
15 fine, but we need to make sure that you're packed up and out  
16 by 5:00.

17 I did do some rearranging of my criminal calendar and  
18 found another block for you next Thursday. And we'll continue  
19 to look at my calendar to see if I can get this in before my  
20 criminal trial starts.

21 **MR. BORNSTEIN:** Thank you, Your Honor. We appreciate  
22 that.

23 **THE COURT:** Okay. All right. Let's get the witness  
24 back and we'll keep going.

25 **MR. PERRY:** May I step out to get him, Your Honor?

1 He's in the hall.

2 **THE COURT:** Yes, thank you, Mr. Perry.

3 Mr. Even, good afternoon.

4 **MR. EVEN:** Good afternoon, Your Honor.

5 Your Honor, if we may bring up a supplemental binder and  
6 put the binders up with the witness.

7 **THE COURT:** You may.

8 Okay. You may be seated, Mr. Roman. Good afternoon.

9 **THE WITNESS:** Thank you. Good afternoon, Your Honor.

10 **THE COURT:** You understand you're still under oath.

11 **THE WITNESS:** Yes.

12 **THE COURT:** All right. You may proceed when you're  
13 ready.

14 **MR. EVEN:** Thank you, Your Honor.

15  
16 **ALEX ROMAN,**

17 called as a witness for the PLAINTIFF, having been duly sworn,  
18 continued testifying as follows:

19 **DIRECT EXAMINATION** (Resumed)

20 **BY MR. EVEN:**

21 **Q.** Good afternoon, Mr. Roman.

22 **A.** Good afternoon.

23 **Q.** Are you ready to proceed with the rest of your  
24 examination?

25 **A.** Yes, I am.

1 Q. So if you turn, you will see or you should see before you  
2 that you now have two binders, a big one and a small one. Do  
3 you see that?

4 A. Yes.

5 Q. And the small one contains some additional documents. The  
6 main one that is going to be of import for our examination now  
7 is marked 0009A.

8 A. Um-hmm.

9 Q. You see that?

10 A. (Reviewing document.)

11 Um-hmm. Yes.

12 Q. Yes.

13 And 009A is essentially the same price committee deck that  
14 we discussed last time, correct?

15 A. Correct.

16 Q. And the only change you will see there is that there are  
17 some highlightings. The highlightings mark the portions about  
18 which we are not allowed to speak out loud in public, and so I  
19 will refrain from mentioning the numbers and words that are  
20 covered in highlighting and I ask you do the same.

21 So we left off on Wednesday talking about the slide marked  
22 009.12. You remember that?

23 (Exhibit published.)

24 **THE WITNESS:** (Reviewing document.)

25 Yes, I do.



1 **BY MR. EVEN:**

2 **Q.** And this slide shows your projections of an 18 percent of  
3 what you called an effective commission for linked purchases  
4 were Apple to adopt a 27 percent commission rate and a  
5 seven-day window, right?

6 **A.** That is correct.

7 **THE COURT:** And do you want this publicized? Do you  
8 want it on the monitors?

9 **MR. EVEN:** Yes. Thank you, Your Honor. The monitors  
10 will show the redacted version.

11 **THE COURT:** That's fine. I just -- other people  
12 couldn't see it. That's all.

13 Go ahead.

14 **MR. EVEN:** Thank you, Your Honor.

15 **Q.** And you mentioned on Wednesday that some of the  
16 assumptions that went into this figure are presented in the  
17 following slide, correct?

18 **A.** That is correct.

19 **Q.** So let's take a look at the next slide, and that's 009.13,  
20 to see how Apple and you got to this 18 percent effective  
21 commission rate.

22 (Exhibit published.)

23 **BY MR. EVEN:**

24 **Q.** Let's start by talking about entitlement billing, which is  
25 the first line. Do you see that?

1 A. Yes, I do.

2 Q. And entitlement billing is the projected annual value of  
3 all the transactions that users will make outside of the app  
4 at any point in time so long as such transactions were made  
5 after the user clicked on an external purchase link, correct?

6 A. That is correct.

7 Q. And in this slide, to get to this entitlement billings  
8 number, you begin your journey with the total United States  
9 App Store billings number, correct?

10 A. That is correct.

11 Q. And we can see that number if we look at CX-009.10,  
12 correct?

13 A. One clarification. On Slide -- or on dot ten, this is the  
14 baseline of the billings for fiscal year '23.

15 THE COURT: Okay. I want to you move that mic closer  
16 to you, or you can move closer to it. All right.

17 So you said back on .10A -- repeat what you just said.

18 THE WITNESS: This is the U.S. portion of -- or this  
19 is fiscal year '23 figures which is our baseline from which  
20 comparisons would be derived.

21 BY MR. EVEN:

22 Q. Understood.

23 A. And entitlement billings on dot 13, we rolled that two  
24 years into the future as we assume that there is going to be a  
25 ramp. So the numbers come from dot ten, but there is a

1 calculation in the middle.

2 Q. Okay.

3 A. Or right at the starting point.

4 Q. All right. And that calculation is not reflected anywhere  
5 in this slide deck, correct?

6 A. It is not.

7 Q. Okay.

8 Ballpark, we can assume that you started your journey with  
9 the number at the top row marked App Store Billing under the  
10 heading U.S. and on Slide 10?

11 A. That is correct.

12 Q. Okay.

13 Going back to Slide 009.13, what you did to get to the  
14 entitlement billings on this slide is, first of all, you  
15 multiplied the total billings number by -- well, it's a  
16 two-step process, right? You multiplied by two of your  
17 financial assumptions, correct?

18 A. That is correct. And there is one additional step but --  
19 roughly speaking, yes.

20 Q. Okay. Let's go through these -- through these  
21 calculations.

22 So first of all, you multiplied the total billings by the  
23 rightmost assumption on this page that is highlighted, and we  
24 can't speak to the number, correct?

25 A. Correct.

1 Q. And that assumption on the right is your team's assumption  
2 as to what portion of App Store billings will be made through  
3 apps that have a purchase link option, correct?

4 A. Not exactly.

5 Q. Sir, if I understand correctly, the assumption here is  
6 that that portion on the rightmost-hand side reflects the  
7 proportion of billings that will go through apps or through  
8 developers with apps that have adopted a purchase link,  
9 correct?

10 A. Almost.

11 Q. And your correction is...?

12 A. This would be the universe of all apps and billings going  
13 through those apps that would enable the linkout entitlement.

14 Q. Okay. So roughly speaking, and I understand that  
15 purchases are not evenly distributed, but roughly speaking  
16 that number shows, ballpark, your assumption as to the  
17 proportion of eligible developers that will implement a  
18 purchase link in their app, correct?

19 A. That is correct.

20 Q. And eligible developers in this context is every developer  
21 that has an app on the U.S. App Store front that offers in-app  
22 purchases of digital goods and services, right?

23 A. That is correct.

24 Q. So without saying the number out loud, Apple's assumption  
25 here is that a significant majority of eligible developers

1 will actually adopt and implement a purchase link in their  
2 app, correct?

3 A. That is correct.

4 Q. Now, you do not present here any study or data to support  
5 that assumption about adoption by a majority of developers,  
6 correct?

7 A. That is correct.

8 Q. And you did not actually conduct any study to support that  
9 assumption, did you?

10 A. No, we did not.

11 Q. Did your team come with that assumption by itself?

12 A. In collaboration with the other people preparing this  
13 deck, yes.

14 Q. Okay.

15 But with no data to support it, correct?

16 A. That is correct.

17 Q. Okay.

18 Next, you multiply the product by the number showing in  
19 the next assumption to the left, correct?

20 A. That is correct.

21 Q. And that number is the percentage of billings that Apple  
22 estimated would be made outside the app rather than in the app  
23 for apps implementing a purchase link, correct?

24 A. Almost.

25 Q. Well, let me ask it differently.

1 Do you agree with me that at least as a ballpark, and I  
2 understand that purchases, just like sales, are not evenly  
3 distributed across users, but roughly speaking, this number  
4 reflects the proportion of the users that Apple estimated will  
5 click the purchase link if given the option, correct?

6 **A.** Roughly speaking, that's correct.

7 **Q.** So without saying that number out loud, Apple's assumption  
8 here is that even when the apps have the option, substantially  
9 less than half of all users making purchases in apps utilizing  
10 purchase links would actually utilize those purchase links as  
11 opposed to IAP, correct?

12 **A.** That is correct.

13 **Q.** You did not present any study or data supporting that  
14 assumption in any way, correct?

15 **A.** That is correct.

16 **Q.** And you did not actually conduct any study to support that  
17 assumption, correct?

18 **A.** That is correct.

19 **Q.** That's another assumption that you and your team  
20 essentially made up, correct?

21 **A.** That is correct.

22 **THE COURT:** Now, what would help me, Mr. Even, just  
23 because I'm sure I'm going to have to go back to the  
24 transcript, is that perhaps we could number these blocks. And  
25 by that, I mean you have here on the screen dollar

1 projections.

2 **MR. EVEN:** Yep.

3 **THE COURT:** And underneath that, we have six blocks.  
4 Maybe we could identify, you know, when we're talking about  
5 them, talk about them as block one, two, three, four, five,  
6 six.

7 **MR. EVEN:** I will try to do that, Your Honor.

8 **THE COURT:** Just because I'm -- it's hard to just  
9 follow.

10 **MR. EVEN:** Understood, Your Honor. I will do my  
11 best.

12 **THE COURT:** Okay. Thank you.

13 **BY MR. EVEN:**

14 **Q.** So just to recap where we are right now, we took the  
15 number on Slide 10, we multiplied it by the first financial  
16 assumption, which is the rightmost financial assumption. And  
17 then we multiplied that by the second financial assumption.  
18 And that lands us on what is block number 1, entitlement  
19 billings, on Slide 13, correct?

20 **A.** Roughly speaking.

21 **Q.** And the roughly speaking is because we didn't actually  
22 take the number at Slide 10, but we projected it forward by a  
23 couple of years.

24 **A.** That is correct.

25 **Q.** Okay. So now let's take a look at the next row on this

1 chart which is labeled "Commission on 100 percent of  
2 entitlement billings." Right?

3 **A.** That is correct.

4 **Q.** And this represents the commission that Apple estimated it  
5 would have collected on linked purchases if there were no  
6 seven-days window, meaning that it would continue to collect  
7 the link purchase fee on out-of-app purchases in perpetuity,  
8 correct?

9 **A.** Not precisely.

10 **Q.** What am I missing?

11 **A.** The way I would describe it is these would be the  
12 commissions that Apple would collect if there would be no  
13 entitlement or no link out. In normal course, this would be  
14 the commission that Apple would collect.

15 **Q.** Okay. This would be the commission that Apple would  
16 collect on purchases outside of the app, correct, at  
17 27 percent?

18 Let me state it differently.

19 What you mean to say is if these purchases were just made  
20 inside the app and we had a 27 percent and a 12 percent fee on  
21 those instead of 30 and 15, that is the commission we would  
22 have expected to collect, correct?

23 **A.** That is correct.

24 **Q.** All right. You agree with me that that is the same like  
25 saying I would just -- strike that.



1           You agree with me that that is the same as saying this is  
2           the commission that Apple would expect to charge on out-of-app  
3           purchases assuming that it had hundred percent collection  
4           and -- and no time limit -- no window?

5           **A.** They would be very similar.

6           **Q.** Okay. And then to the right you show a percentage which  
7           you call here effective commission, correct?

8           **A.** That is correct.

9           **Q.** And that percentage is showing the blended average between  
10          purchases that Apple says would be at 27 percent and purchases  
11          that would be at 12 percent, and that would be the effective  
12          average commission, correct?

13          **A.** That is correct.

14          **Q.** All right. Then you go to the next line and you are  
15          talking about loss due to lower billings on -- in seven-day  
16          attribution window, correct?

17          **A.** That is correct.

18          **Q.** This row, which is row 3, is Apple's projection for what  
19          percentage of out-of-app purchases made after user clicked on  
20          a link would take place more than seven days after the link  
21          was clicked, correct?

22          **A.** That is correct.

23          **Q.** And so without stating the number out loud, you are  
24          estimating here that most purchases made following the use of  
25          a purchase link would be made outside of the seven-day window,

1 correct?

2 A. That is correct.

3 Q. I'll get back to this assumption in a second, but let's  
4 first look at the rest of the slide.

5 So the next line, line 4, projected revenue, that is the  
6 commission that Apple estimated it would collect if all future  
7 sales are via direct web, meaning the user never goes back and  
8 clicks the link again but keeps making purchases outside of  
9 the app, correct?

10 A. That is correct.

11 Q. And that figure is just calculated by subtracting --  
12 subtracting -- sorry -- row 3 from row 2, correct?

13 A. That is correct.

14 Q. And then the next two rows show an adjustment that Apple  
15 is making by assuming that for future transaction, 50 percent  
16 of users would actually click on the in-app link again,  
17 correct?

18 A. That is correct.

19 Q. And that's what the 50 percent returning customer means in  
20 the financial assumptions at the bottom of the slide, correct?

21 A. That is correct.

22 Q. In other words, if a user clicks a link in a game, for  
23 instance, or in an app to buy some content on the web, and  
24 then a month later they want to buy more of that content, your  
25 assumption here is that there's a 50/50 chance that the user

1 will do that by going back into the app to click on the link  
2 again rather than just going back to the developer's website,  
3 correct?

4 **A.** That is correct.

5 **Q.** And you made this 50/50 estimate even though within the  
6 app, developer is not allowed to ask the user or remind the  
7 user, please don't click the app, that costs me a lot of  
8 money. The developer's not allowed to say that to users in  
9 the app, correct?

10 **A.** I am not sure.

11 **Q.** You don't know the rules about what developers can tell in  
12 the external link within the app?

13 **A.** Not sure how developers would implement.

14 **Q.** Okay. And you made this assumption even though if  
15 developer does not really have any way to incentivize the user  
16 not to click the purchase link again, correct?

17 **A.** That is correct.

18 **Q.** And you also have -- as with your other assumptions, you  
19 did not present any study or data to support your assumption  
20 that most users would -- that most purchases would be made  
21 outside of the seven-day window or that only 50 percent of  
22 users would reclick on the purchase link?

23 **A.** That is correct.

24 **Q.** And you did not actually conduct any study to support  
25 those assumptions, did you?

1       **A.** No, we did not.

2               **THE COURT:** Who -- who fed you your assumptions, if  
3 anyone? Because I don't understand how you can make  
4 assumptions without understanding how the link entitlement  
5 works.

6               **THE WITNESS:** Your Honor, we usually have to make  
7 assumptions when we don't have a good precedent. In this  
8 case, we met as a team and we debated around what would be the  
9 potential outcomes that this could have.

10              There is inherent risk in our assumptions, but we all felt  
11 that the answer could be close to the assumptions that we used  
12 for these financial models.

13              **THE COURT:** Don't you have to understand how the link  
14 works to gauge your assumptions?

15              **THE WITNESS:** Yes.

16              **THE COURT:** But you just testified you did not  
17 understand how the link worked.

18              **THE WITNESS:** We relied on our business team to give  
19 us that guidance.

20              **THE COURT:** Proceed.

21       **BY MR. EVEN:**

22       **Q.** Let's go back to Slide 9.12 for a second, okay?

23       **A.** (Reviewing document.)

24       **Q.** Because now we can understand it a little better.

25              First of all, the reason that the rate is 18 percent at

1 24 hours, 72 hours, and seven days is because Apple assumes  
2 without any evidence that after an initial spike of purchases  
3 immediately after a link is clicked, there would be a very  
4 long tail of future purchases, most of which would occur  
5 outside the seven-day window, correct?

6 **A.** For that specific statement, we do have data that outlines  
7 for us what percentage of purchases is conducted in these time  
8 periods.

9 **Q.** You have data on what -- I just asked you that question  
10 and you said you had no data and conducted no study that  
11 allowed you to assume that most purchases are going to be made  
12 outside of the seven-days window. Are you changing that  
13 testimony now?

14 **A.** I understood your question to refer to other assumptions.

15 **Q.** Okay. So you are changing your testimony. You're now --  
16 now you have data that supports that most of the purchases are  
17 going to be made after more than seven days without  
18 reclicking?

19 **A.** There is a difference between those two.

20 **Q.** Okay. Let me break that one by one.

21 Is your testimony now that you can support or you had  
22 support, you believe, for the assumption that more than half  
23 of purchases would be made outside of the seven-day window  
24 after users clicked?

25 **A.** Can you rephrase that question, please?

1 Q. No. The question is very clear. It's your testimony.  
2 You are now telling me if -- contrary to what you told me two  
3 minutes ago, that in fact you did have data supposedly  
4 supporting the assumption that more than half of purchases are  
5 going to be made after the seven-day window.  
6 A. Those data points we do have.  
7 Q. Okay. You did not present those data points in any of  
8 your -- in your declaration or in this deck, correct?  
9 A. That is correct.  
10 Q. And you still stand by your testimony that you had no  
11 basis for the assumption that 50 percent of the people will  
12 actually click again, correct?  
13 A. That is correct.  
14 Q. And you mentioned in response to the Court's question that  
15 you obtained some data from the business team; is that what  
16 you said?  
17 A. We discussed our assumptions with our business management  
18 team.  
19 Q. Who is the business management team that you discussed  
20 your assumptions with?  
21 A. This is a team that supports the App Store.  
22 Q. I need names, sir. Who is on that team?  
23 A. Mr. Oliver.  
24 Q. Anyone else?  
25 A. There were several individuals involved. Mr. Oliver and

1 Mr. Kim would have been the primary ones.

2 Q. What is Mr. Kim's first name?

3 A. Timothy.

4 Q. Looking at this 18 percent number, now that we understand  
5 the analysis, contrary to what the slide shows, your analysis,  
6 even if it were somehow reliable, does not in fact suggest  
7 that the effective commission rate for a developer subject to  
8 a 27 percent fee would be 18 percent, correct?

9 A. I disagree.

10 Q. The slide doesn't show that a developer with a  
11 27 percent -- subject to a 27 percent fee would in fact have  
12 an effective fee of 18 percent, right? The slide instead  
13 suggests that Apple, on average, would see an 18 percent fee  
14 because it imposes both a 27 percent fee and a 12 percent fee,  
15 correct?

16 A. It is my estimation that developers would observe this  
17 commission rate, effective commission rate.

18 Q. Sir, that effective commission rate is a weighted average  
19 of what developers subject to 27 percent and developers  
20 subject to 12 percent would see, correct?

21 A. In addition to the billings that would occur after seven  
22 days.

23 Q. Sir, that 18 percent is a weighted average of the overall  
24 effective commission that Apple would charge assuming a  
25 27 percent standard fee and 12 percent reduced fee, correct?

1     **A.** I believe the number that you're referring to is stated on  
2     the following slide.

3     **Q.** Sir, the following slide showed us a calculation that  
4     assumed a weighted average between 27 percent and 12 percent,  
5     correct?

6     **A.** Correct.

7     **Q.** And that's how you got to 18 percent, correct? In  
8     addition to other things, part of getting to 18 percent was  
9     having a weighted average between 27 percent and 12 percent,  
10    correct?

11    **A.** That is correct.

12    **Q.** And so a developer that's subject to a 12 percent fee  
13    would actually see some kind of fee that's between 12 and 18,  
14    and a developer that's subject to 27 percent would see some  
15    kind of fee that's between 18 and 27 even if all your  
16    assumptions were somehow real, correct?

17    **A.** Almost.

18    **Q.** You don't show anywhere in this slide deck what would be  
19    the effective rate that would be seen by a developer that is  
20    subject to a 27 percent fee even if all your assumptions were  
21    correct; is that right?

22    **A.** That is correct.

23    **Q.** Let's turn to the slide labeled CX-009.14 and see what you  
24    did in addition to this with your assumptions.

25                                   (Exhibit published.)



1 **BY MR. EVEN:**

2 **Q.** So this slide contains two different charts showing the  
3 supposed projected impact on Apple's revenue and gross margin  
4 of different standard commission rates and duration windows,  
5 correct?

6 **A.** That is correct.

7 **Q.** And at the bottom of this chart, there are four financial  
8 assumptions, correct?

9 **A.** That is correct.

10 **Q.** Two of those are the same as what we just looked at, at  
11 the -- on Slide CX-009.13, correct?

12 **A.** That is correct.

13 **Q.** And the chart itself, what it shows us is essentially a  
14 matrix saying, for instance, at a 27 percent rate with a  
15 seven -- with a seven-days window, Apple will see a decline in  
16 revenue of the number that's showing in white there, correct?

17 **A.** That is correct.

18 **Q.** And Apple will see a decline in margin as a percentage in  
19 the numbers that are shown in red, correct, on the right-hand  
20 side?

21 **A.** That is correct.

22 **Q.** So let's again begin with the assumption to the far right.  
23 As we said, that assumption reflects your estimate that a  
24 substantial majority of developers would implement a purchase  
25 link within their apps, correct?

1 A. That is correct.

2 Q. And we have one number for that assumption here, correct?

3 A. That is correct.

4 Q. And so the assumption you applied here is that the same  
5 substantial majority of developers would implement purchase  
6 links within their apps regardless of the fee that Apple  
7 imposed, whether it's 20 percent, 23 percent, 25 percent,  
8 27 percent, 30 percent, adoption rate would remain constant,  
9 correct?

10 A. That is correct.

11 Q. In other words, you did not assume that a lower fee would  
12 encourage adoption.

13 A. We assumed that --

14 Q. Sir, you did not assume that a lower fee would encourage  
15 adoption, correct? You assumed that adoption would remain  
16 constant regardless of the fee.

17 A. That is correct.

18 Q. And you did not assume that a high fee would deter  
19 adoption, did you?

20 A. Within this range, that is correct.

21 Q. So you just ignored any effect pricing might have on  
22 demand in this case. You assumed it away.

23 A. Given the benefit, we assumed that it would be similar  
24 across the range.

25 Q. Sir, you ignored any effect pricing might have on demand

1 in this range, correct? You assumed a constant adoption rate.

2 A. That is correct.

3 Q. Now, you have an MBA, right?

4 A. That is correct.

5 Q. You understand what is a demand curve?

6 A. I am familiar.

7 Q. You understand that generally speaking when prices go up,  
8 demand goes down?

9 A. Yes.

10 Q. And you understand that when prices go down, demand goes  
11 up?

12 A. Usually.

13 Q. And you understand that in general, in companies that sit  
14 down to conduct pricing exercises, one of the most important  
15 considerations is what is the demand curve we are facing,  
16 right? How do we price on the demand curve, right?

17 A. That is correct.

18 Q. But here you just assumed all of that away.

19 A. That is correct.

20 Q. Let's move to the next assumption which was your  
21 assumption concerning how many users would click a purchase  
22 link if given the option, right?

23 A. That is correct.

24 Q. And here, Apple is assuming that the same portion of users  
25 will click a purchase link no matter what the standard

1 commission rate is, correct?

2 A. That is correct.

3 Q. Now, you understand that if a developer has to pay a high  
4 fee to Apple on linked purchases, the developer could offer a  
5 small discount, if any discount, on purchase links, correct?

6 A. That is correct.

7 Q. And if a developer were to pay Apple no fee or a low fee,  
8 they could offer a larger discount to users, correct?

9 A. At their discretion.

10 Q. At their discretion, they could offer lower prices to  
11 users if their costs went down, correct?

12 A. They have that choice, that is correct.

13 Q. And you understand that the discount the developer could  
14 offer users would affect how many users would actually click,  
15 correct?

16 A. It could. Correct.

17 Q. It could, you said? Okay.

18 This is again demand curve, correct?

19 A. That is correct.

20 Q. If price goes up, less people click, correct?

21 A. That is correct.

22 Q. And if price goes down, more people click, right?

23 A. That is potentially true.

24 Q. In fact you told us yesterday that you fully understood  
25 that the idea here is that developers could offer lower prices

1 to users, right?

2 A. That is correct.

3 Q. But you just assumed that users would click at the very  
4 same rate no matter if somebody offers them a 10 percent, a  
5 5 percent, a 1 percent, or no discount, they will click at the  
6 same rate.

7 A. Depending on the developer choices.

8 Q. No. Depending on what you elected as the fee.

9 A. Some developers -- or developer strategies will vary.

10 Q. Sir, I'm not asking about developer strategies, and I  
11 don't, with respect, think that you are qualified to speak to  
12 developer strategies.

13 What I'm asking you is about your pricing exercise. Your  
14 pricing exercise assumed away the demand curve, assumed the  
15 developers will not pass on any savings, and that the  
16 developers' cost structure is not going to affect demand for  
17 the developers' out-of-app purchases at all, correct?

18 A. That is correct.

19 Q. And just so we're crystal clear, your chart here goes all  
20 the way up to 30 percent, correct?

21 A. That is correct.

22 Q. And so we're crystal clear, a predicate of the analysis  
23 that Apple supposedly relied on and then submitted to this  
24 Court is that there will be large-scale adoption of link  
25 entitlement by developers even if Apple imposed a 30 percent

1 fee on linked purchases, making linked purchases, by  
2 definition, more expensive to developers than IAP, correct?

3 **A.** I disagree.

4 **Q.** You disagree. Okay.

5 Apple has not presented any analysis in this Court showing  
6 that any developer would actually adopt linked entitlements at  
7 30 percent, correct?

8 **A.** That is correct.

9 **Q.** In fact, that same is true for 27 percent, correct?

10 **A.** That is correct.

11 **Q.** And Apple also has not offered any testimony from any  
12 developer that intends to adopt link entitlements at the  
13 current fee level, correct?

14 **A.** I am not aware.

15 **Q.** So I want to go back to that. But before we do, let's  
16 finish off the slide deck for a second.

17 So go to Slide 15, the next slide.

18 (Exhibit published.)

19 **BY MR. EVEN:**

20 **Q.** And here, we see your recommendation about program  
21 eligibility, correct?

22 **A.** That is correct.

23 **Q.** And your recommendation is that developers that are  
24 subject to the video partner program and the news partner  
25 program will not be eligible, correct?

1 A. That is correct.

2 Q. And developers who are subject to those programs have a  
3 standard rate of 15 percent instead of 30 percent, correct?

4 A. That is correct.

5 Q. In other words, if a subscription video app like *Disney*  
6 *Plus* or a newspaper developer like the *New York Times* wants to  
7 use external purchase links in their app, they will no longer  
8 be eligible for the 15 percent commission for in-app  
9 purchases, correct?

10 A. That is correct.

11 Q. Instead they will have to pay Apple twice, 30 percent, for  
12 in-app purchases, correct?

13 A. If they chose that, correct.

14 Q. The price committee deck provides no explanation on why  
15 you recommended that the video and news program members not be  
16 eligible for external links, correct?

17 A. That is something that is not part of the deck.

18 Q. We looked at the language of the Court's injunction  
19 yesterday, correct?

20 A. That is correct.

21 Q. Can you direct me -- I think it's in Slide 2 or 3 -- can  
22 you direct me to the part of the Court's injunction that  
23 permits Apple to double the IAP commission on any video or  
24 news developer that chooses to steer users outside the app?

25 / / /

1       **A.**    (Reviewing document.)

2            I do not know.

3       **Q.**    Who told you that it's okay for Apple to determine  
4            eligibility terms for benefits that Apple was directed by the  
5            Court to provide to developers?

6            **MR. PERRY:**   Objection, Your Honor.   Calls for a legal  
7            conclusion.

8            **THE COURT:**   Other than your lawyer.   You can answer  
9            the question.

10           **THE WITNESS:**   In conjunction with our business team  
11            and our legal team, we arrived at that determination.

12       **BY MR. EVEN:**

13       **Q.**    Who is it on the business team that told you that it's  
14            okay for Apple to determine that certain developers would be  
15            subject to a doubling of their IAP rates if they choose to  
16            steer.

17       **A.**    We did not discuss that.

18       **Q.**    Sir, that is what you recommended.   It's your deck.   You  
19            recommended that, right?   You recommended that people who have  
20            a 15 percent fee would be subject to a penalty of doubling  
21            their fee if they choose to steer.

22       **A.**    That's not how we discussed it.

23       **Q.**    You understand that's how it is, though, right?

24       **A.**    I do not know.

25       **Q.**    You don't know.



1 Well, if you were the *New York Times*, isn't that how you  
2 would view this?

3 **A.** I do not know.

4 **Q.** You don't know. Okay.

5 Did you ask anyone how come some developers are not  
6 eligible to the benefits of a court-mandated injunction?

7 **A.** We developed our recommendation in conjunction with our  
8 business team and our legal team.

9 **THE COURT:** What factors did you discuss that led you  
10 to distinguish between someone -- well, that led you to make  
11 any distinguishing whatsoever? What were the factors that you  
12 discussed in making the determination to separate these  
13 groups?

14 **THE WITNESS:** Your Honor, Mr. Oliver might be better  
15 qualified --

16 **THE COURT:** You tell me what you discussed with them.  
17 I don't -- I'll hear from him too. I want to know what you  
18 said and what you were part of those discussions.

19 **THE WITNESS:** Your Honor, the video partner program  
20 and the news partner program offer deep integration with other  
21 technologies and other operating systems.

22 For instance, the video partner program offers integration  
23 with TBOS and the TV app and allows for content to be surfaced  
24 in those platforms. And it has a deeper integration overall  
25 with the platform and with our offering.

1 And we felt that in the spirit of the program, it was  
2 different than what this program was meant to represent  
3 compared to the entitlement.

4 The same applies for the news partner program which offers  
5 a format for news publishers to provide their content in the  
6 news app which has its own benefits as well.

7 **THE COURT:** I don't recall receiving any indication  
8 from Apple to have permission to make a distinguish -- to  
9 distinguish between apps. Did you discuss that?

10 **THE WITNESS:** I did not discuss that.

11 **MR. EVEN:** May I proceed, Your Honor?

12 **THE COURT:** You may.

13 **MR. EVEN:** Thank you.

14 **Q.** Having gone through your deck I'd like to briefly talk  
15 about what Apple did not do as part of the price committee  
16 process.

17 So go back to Slide 009.6.

18 (Exhibit published.)

19 **BY MR. EVEN:**

20 **Q.** Do you have that? It's also on your screen. This one is  
21 not redacted.

22 **A.** (Reviewing document.)

23 **Q.** Do you see it?

24 **A.** Yes, I see it.

25 **Q.** And as we discussed on Wednesday, for this bottoms-up

1 analysis that you've done, Apple identified and quantified  
2 four categories of value, platform technology, developer  
3 tools, distribution, and discovery, correct?

4 **A.** That is correct.

5 **Q.** Then Apple identified but refrained from qualifying --  
6 from quantifying -- sorry -- the value of the payment services  
7 delivered by Apple for developers using IAP, correct?

8 **A.** That is correct.

9 **Q.** And that shows up at the very bottom, and it specifically  
10 says no valuation exercise undertaken, correct?

11 **A.** That is correct.

12 **Q.** Now because Apple decided not to assess the value of IAP  
13 in this context, the price committee deck also does not  
14 include any assessment of the cost to Apple of providing the  
15 IAP solution to developers, correct?

16 **A.** It is not discussed specifically. It is part of our  
17 underlying financial projections.

18 **Q.** I understand you have a general P&L and somewhere in there  
19 there's IAP, but there's no slide here that analyzes and says  
20 we think IAP costs us X, correct?

21 **A.** That is correct.

22 **Q.** And because Apple did not set out to assess the value of  
23 IAP, Apple also did not look at comparables to estimate the  
24 costs of alternative payment solutions that developers will  
25 need to procure to facilitate linked purchases, correct?

1     **A.** That is correct.

2       **Q.** Was it your decision to refrain from making any assessment  
3       of the value or cost of the payment solution and related  
4       services Apple provides through IAP?

5     **A.** No, it was not.

6     **Q.** Whose decision was that?

7     **A.**    Our business team.

8 **Q.** Who derivative at the business team? I need a name.

9       **A.**   Mr. Oliver.

10        **Q.** Mr. Oliver decided that?

11 **A.** We did not include it in our benchmarking exercise.

12     **Q.**    I understand.

13 (Simultaneous colloquy.)

14 BY MR. EVEN:

15     **Q.** Was that a decision that was taken by Mr. Oliver?

16     **A.** That is correct.

17 Q. Okay. Who is it that made the decision not to try to  
18 assess how much it would cost developers to obtain alternative  
19 payment systems for their purchase links?

20       **A.**   I do not recall.

21                   **THE COURT:** Can you tell me -- you said you were vice  
22                   president of finance. Right?

23                   **THE WITNESS:** Yes, Your Honor.

24                   **THE COURT:** And you emphasized "a." How many are  
25                   there?

1           **THE WITNESS:** There is a few.

2           **THE COURT:** How many, ballpark?

3           **THE WITNESS:** Five.

4           **THE COURT:** And to whom do you report?

5           **THE WITNESS:** To our chief financial officer.

6           **THE COURT:** Mr. Oliver is called a senior director.

7           In the hierarchy of Apple, is a vice president more senior  
8           than a senior director or vice versa?

9           **THE WITNESS:** A vice president is more senior. But  
10          at Apple, we don't pay that much attention to that hierarchy,  
11          Your Honor.

12          **THE COURT:** To whom does Mr. Oliver report?

13          **THE WITNESS:** To Mr. Fischer.

14          **THE COURT:** Okay. Proceed.

15          **MR. EVEN:** Thank you, Your Honor.

16          **Q.** Now the price committee deck specifically reports on the  
17          fact that the value of IAP or comparables is an analysis that  
18          was not taken, correct?

19          **A.** That is correct.

20          **Q.** The price committee deck does not report on any other  
21          analysis that was not taken, correct?

22          **A.** That is correct.

23          **Q.** Who is it that decided that the price committee deck  
24          should include a specific mention of an analysis not  
25          performed?

1       **A.** The decision would have been made by Mr. Oliver.

2               **THE COURT:** Who did the initial draft of this slide  
3       deck?

4               **THE WITNESS:** I do not recall, Your Honor. But I  
5       would be -- I would be almost sure that my team would have  
6       started the first draft of this deck.

7               **THE COURT:** Proceed.

8               **MR. EVEN:** Thank you, Your Honor.

9       **Q.** Did you ever ask anyone why Apple did not try to estimate  
10      the value or the cost of alternative payment solutions?

11      **A.** Yes, I did.

12      **Q.** Who did you ask?

13      **A.** Mr. Oliver.

14      **Q.** And what did Mr. Oliver tell you?

15      **A.** Because we're not charging for in-app purchase payments  
16      through the linkout.

17      **Q.** Well, sir, you understand, do you not, that a developer  
18      that utilizes a purchase link to steer users outside the app  
19      would have to bear the cost of an alternative payment solution  
20      to -- to complete the transaction on their website, correct?

21      **A.** That is correct.

22      **Q.** And you understand that Apple's new fee for linked  
23      purchase, which is only 3 percent less than the fees for IAP,  
24      would make linked purchases more expensive than IAP for any  
25      developer that is unable to obtain alternative payment

1 solutions for less than 3 percent, right?

2 **A.** The effective rate is less than 27 percent.

3 **Q.** Sir, we talked yesterday about the definition of linked  
4 purchases, and we agreed, I believe, on the record that linked  
5 purchases are purchases made within the seven-days window. So  
6 those are the purchases that I'm talking about. Purchases  
7 made within the seven-days window.

8 If a developer is subject to a 27 percent Apple fee and  
9 can't obtain payments for less than 3 percent, those purchases  
10 would be more costly to that developer than using IAP,  
11 correct?

12 **A.** For that specific period of time, that is correct.

13 **Q.** And you're aware, are you not, that developers generally  
14 cannot obtain payment solutions for 3 percent or less?

15 **A.** Based on my information, there is a wide range.

16 **Q.** All right. Well, for example, are you aware that the  
17 trial record in this case showed that Epic's average cost for  
18 payment services in the U.S. was three-and-a-half percent?

19 **A.** I was not aware.

20 **Q.** That's not something that you looked into as part of your  
21 work on the price committee?

22 **A.** I did not.

23 **Q.** That's not something you considered relevant to your work  
24 on the fee that would apply to linked purchases?

25 **A.** We did not consider it to be as relevant.

1 Q. Are you aware that Mr. Ben Simon, the CEO of Down Dog, put  
2 in a declaration here that said that he pays three-and-a-half  
3 percent to six-and-a-half percent to Stripe and PayPal to  
4 process payments for transactions that occur on its website?

5 A. I have not seen his declaration.

6 Q. Setting aside his declaration, did you look into the  
7 prices of PayPal and Stripe during your work on the price  
8 committee deck?

9 A. I did not.

10 Q. Are you aware that in November 2023 while you were working  
11 on your deck, in a case between Epic and Google, witnesses  
12 from Google testified that even Google, with all its scale,  
13 bears a cost between 4 percent and 6 percent to provide  
14 payment services to Android developers?

15 A. I was not aware.

16 THE COURT: Were you not even curious about this  
17 topic as a vice president of finance?

18 THE WITNESS: Your Honor, as part of our work  
19 supporting the App Store payment processing and payment fees  
20 is one of our largest costs, so that is something that we  
21 actively manage with the networks and with financial  
22 institutions.

23 The landscape is extremely fragmented and there's many  
24 options out there. Individual developer implementations, I'm  
25 not as familiar with. Everyone chooses a different payment



1 stack.

2 **BY MR. EVEN:**

3 **Q.** So everybody chooses a different payment system maybe, but  
4 you understand that Epic and Down Dog and Google and Spotify  
5 and Meta and Microsoft and Match all told this Court that  
6 developers cannot obtain payment solutions for less than  
7 three percent?

8 **A.** I was not aware.

9 **Q.** And you've not looked into any of that during your work on  
10 the price committee deck.

11 **A.** We did not.

12 **Q.** By "we," you mean we, Apple did not, the team that worked  
13 on this deck?

14 **A.** That is correct.

15 **Q.** And you're not aware of anyone else providing an analysis  
16 of the value of IAP to the price committee, right?

17 **A.** We did not provide that analysis in this deck.

18 **Q.** That's not what I asked. You're not aware of anyone else  
19 outside of your team that somehow worked on this and provided  
20 a different analysis to the price committee, correct?

21 **A.** That is correct.

22 **Q.** Now, on Wednesday, you told the Court that you fully  
23 understood that a fundamental goal of the injunction was that  
24 developers could charge and offer users lower prices on  
25 out-of-app purchases, correct?

1 A. That is correct.

2 Q. But without undertaking any estimate of the cost to  
3 developers of alternative payment solutions, you had no  
4 ability to assess whether developers could or could not charge  
5 or offer lower prices to users, could you?

6 A. Based on our analysis, the effective commission rate is  
7 lower.

8 Q. The effective commission rate to Apple based on an  
9 analysis on no evidence is lower, but you understand that  
10 there are other cost lines including alternative payment  
11 solutions, correct?

12 A. That is correct.

13 Q. And so if the fee to Apple, however you calculate it, even  
14 if you accepted all your assessments, has to then be added to  
15 the cost that the developer would bear on alternative payment  
16 solutions in order to assess whether the developer actually  
17 could offer lower prices to users, right?

18 A. That is correct.

19 Q. And you could not even take that step because you had no  
20 clue what it would cost developers to obtain alternative  
21 payment solutions because you chose not to undertake that  
22 analysis, correct?

23 A. The cost to developers to operate their website and to  
24 provide alternative payment methods in conjunction with the  
25 window and --

1 Q. Sir --

2 A. -- the process --

3 Q. -- you understand that a developer here is facing two cost  
4 lines, a fee to Apple and a fee to a payment solution,  
5 correct?

6 A. In addition to internal costs.

7 Q. Sir, not what I'm asking. The internal cost would exist  
8 whether the purchase is outside the app, inside the apps,  
9 whatever.

10 The difference between inside the app and outside the app  
11 is that inside the app, there's a fee that's paid to Apple.  
12 Outside the app, there's a fee that's paid to Apple now for  
13 the first time and a fee that's paid to a payment solution,  
14 correct?

15 A. That is correct.

16 Q. And you chose not to assess one of these two cost lines,  
17 and yet you're telling this Court that you fully understood  
18 that the goal was to set a fee that would allow developers  
19 somehow to provide lower prices to users?

20 A. The effective commission is lower.

21 Q. Okay. Sir, it's a yes-or-no question. Is that your  
22 testimony, that without going out and figuring out what the  
23 other line item costs, you still could make the assumption  
24 that your implementation of the injunction would bring about  
25 lower prices to users?

1       **A.** That is correct.

2       **Q.** Okay.

3               **THE COURT:** How often do you do analysis without  
4 data?

5               **THE WITNESS:** Your Honor, it is frequent that to make  
6 some of these decisions, we do not have perfect information  
7 to --

8               **THE COURT:** You don't have any data. It's not a  
9 question of perfect. It's a question of -- I'm looking for  
10 data, and it sounds like you all made lots of decisions with  
11 no data.

12              **THE WITNESS:** The amount of data, given that we do  
13 not have a good precedent for this, Your Honor, is --

14                               (Simultaneous colloquy.)

15              **THE COURT:** And the goal was then -- it sounds to me  
16 as if the goal was to maintain, as you said last -- before,  
17 the business model and the revenue that you had in the past.  
18 Right? Figuring out a different way to keep your revenue  
19 stream.

20              **THE WITNESS:** We knew that by this implementation,  
21 Your Honor, there would be lower revenue.

22              **THE COURT:** Well, not that much.

23                       But go ahead.

24              **MR. EVEN:** Thank you, Your Honor.

25       **Q.** You knew that there would be less revenue based on the

1 assumption of massive adoption by developers of the link,  
2 correct?

3 **A.** That is correct.

4 **Q.** Okay.

5 Turn to Slide 009.5.

6 (Exhibit published.)

7 **THE COURT:** And to follow on, and obviously more  
8 revenue by those -- by massive refusal to adopt the link. Or  
9 said differently, no revenue change if people did not adopt  
10 the link.

11 **THE WITNESS:** Your Honor, that would be correct. If  
12 nobody would adopt the link, the revenue would remain largely  
13 the same.

14 **THE COURT:** So you didn't have an incentive other  
15 than the injunction to encourage adoption of the link, right?

16 **THE WITNESS:** We -- Your Honor, we tried to comply  
17 with the injunction.

18 **THE COURT:** Go ahead.

19 **MR. EVEN:** Thank you, Your Honor.

20 If we can blow up that Kardashians figure that's on  
21 Slide 009.5.

22 (Exhibit published.)

23 **BY MR. EVEN:**

24 **Q.** Do you see that?

25 **A.** Yes, I do.

1 Q. And that shows what the slide calls an implementation of  
2 the entitlement policy, correct?

3 A. That is correct.

4 Q. And here you say to get 50 percent off go to  
5 [www.hulu.com/welcome](http://www.hulu.com/welcome); right?

6 A. That is correct.

7 Q. In putting this slide together, you fully understood that  
8 a 50 percent off discount is nowhere near realistic given the  
9 fees that you intended to recommend to the price committee, is  
10 it?

11 A. I did not put the slide together. However, I believe that  
12 this is feasible.

13 Q. You believe that it's feasible when the difference, even  
14 if we accept your statements, is between 30 percent and maybe  
15 somewhere between 18 and 30? That's the difference that  
16 allows people to offer 50 percent off?

17 A. That is correct.

18 Q. Okay. I take it your testimony is that you believe that  
19 once this -- word of this got out on January 16, the massive  
20 adoption would start, correct?

21 A. No.

22 Q. All right. Developers can do the same calculation that  
23 you did to get to 18 percent supposedly, right?

24 A. That is correct.

25 Q. And if a developer has an option between 30 percent or

1 18 percent, they would prefer 18, correct?

2 A. That is correct.

3 Q. And you, in fact, estimated that there would be massive  
4 adoption, correct?

5 A. Over time.

6 Q. Over time. Okay.

7 Well, three months have passed between your -- the time  
8 that you -- that the policy was put in place and your  
9 declaration. Have you made any effort to check whether your  
10 projections concerning the rate of adoption hold up?

11 A. We review from time to time.

12 Q. And, well, let me ask you some questions based on that  
13 review.

14 Do you have any idea how many of the top ten games in the  
15 App Store now use link entitlements?

16 A. Based on my last review, none of the top ten games have  
17 adopted the linkout entitlement.

18 Q. I think we can agree with that. I checked and I agree.

19 Moving away from games, are you aware that none of the  
20 major dating apps that offer in-app purchases, like Tinder and  
21 Bumble, have purchase links?

22 A. That is correct.

23 Q. Are you aware that major apps like Adobe Photoshop,  
24 Dropbox, ChatGPT, Twitch, all of which offer in-app purchases,  
25 do not have external purchase links?

1       **A.** That is correct.

2       **Q.** Are you aware, in fact, that no major developer, none,  
3       zero, has even applied for an external link entitlement, let  
4       alone implemented a purchase link in their apps?

5       **A.** That is correct.

6       **Q.** So I want to put your projections in perspective for a  
7       second. This Court has now heard testimony that to date  
8       38 developers have applied for an external link purchase,  
9       right?

10      **A.** Last time I checked it was over 30.

11      **Q.** Okay. The Court has heard -- let me represent to you that  
12      the Court has heard that it's 38. And that number is the  
13      number of developers who have applied, not who have actually  
14      implemented or incorporated a purchase link in their app,  
15      correct?

16      **A.** That is correct.

17      **Q.** Now, Apple's counsel has advised the Court that -- and  
18      Epic that there are over 65,000 developers and over 135,000  
19      apps that are eligible to implement purchase links.

20             Are you familiar with those numbers?

21      **A.** Yes, I am.

22      **Q.** So even if every one of the developers who had applied for  
23      a link entitlement had incorporated a purchase link into their  
24      apps, your projections overestimated the rate of adoption of  
25      link entitlements by more than three orders of magnitude,



1 correct?

2 **A.** I disagree.

3 **Q.** You disagree that 38 out of 65,000 is different from your  
4 assessment of adoption by a factor of more than 1,000?

5 **A.** The factor of adoption is based on a time frame in the  
6 future, not today.

7 **THE COURT:** What time frame?

8 **THE WITNESS:** Your Honor, roughly two years.

9 **BY MR. EVEN:**

10 **Q.** Sir, do you remember how long it took the App Store to  
11 gain -- go from 60 -- from zero to 60 million downloads when  
12 it was first announced?

13 **A.** I do not remember that figure.

14 **Q.** It was less than a week, wasn't it?

15 **A.** I do not know.

16 **Q.** Do you know how long before the App Store got to  
17 50,000 apps?

18 **A.** I do not know.

19 **Q.** Okay. You understand that this is a fast-moving space?

20 **A.** I do not know.

21 **Q.** You don't know that it's fast-moving space. You have no  
22 idea.

23 **A.** For business model adoptions, our experience is different.

24 **Q.** Sir, if you are right and the difference is between  
25 18 percent and 30 percent, that would mean a 40 percent

1 reduction in cost, right, thereabouts?

2 A. That is correct.

3 Q. That's a major reduction in costs, right?

4 A. That is correct.

5 Q. People should flock to a 40 percent reduction in costs,  
6 right?

7 A. They will have to run analysis. That is correct.

8 Q. Okay.

9 In your history as a vice president of finance at Apple,  
10 have you ever modeled anything, made any projection where you  
11 turned out to be off by a factor of more than a thousand?

12 A. No, I have not.

13 Q. This is a first for you. Okay.

14 And your explanation is time?

15 A. That is correct.

16 Q. Let me give you an alternative explanation. Could it be  
17 that the analysis you performed was not an actual attempt to  
18 comply with the injunction or estimate adoption, but instead a  
19 made-for-litigation analysis intended to support a preordained  
20 27 percent fee that Apple knew would be prohibitive to  
21 developers?

22 A. I disagree.

23 Q. You disagree. All right. Let's -- let's talk about that.

24 Is it actually your testimony that you and your team  
25 worked on a clean slate where you developed the 27 percent

1 standard commission for linked purchases from scratch?

2 A. That is correct.

3 Q. And is it your testimony that you were never told by  
4 anyone at any point what the fees for linked purchases should  
5 be, not even as a ballpark?

6 A. That is correct.

7 Q. Well, we saw on Slides 12 and 14 that in addition to  
8 27 percent, you presented some supposed analysis also for fees  
9 of 20 percent, 23 percent, 25 percent, and 30 percent,  
10 correct?

11 (Exhibit published.)

12 **THE WITNESS:** That is correct.

13 **BY MR. EVEN:**

14 Q. You don't include any analysis for fees below 20 percent.

15 A. That is correct.

16 Q. You don't include any analysis for zero percent. Just no  
17 fee, correct?

18 A. That is correct.

19 Q. And was it your decision not to examine any fee below  
20 20 percent?

21 A. In early drafts, we had a wider range.

22 Q. Whose decision was it to cut off at 20 percent?

23 A. In conjunction with the business team, we decided that  
24 this range would be more representative.

25 Q. More representative of what?

1     **A.** Of the value and the benchmarking data that we provide  
2     here.

3     **Q.** Sir, you just explained to the Court that this was  
4     unprecedented, which I kind of agree with. For 15 years,  
5     you've never charged anything. Did you check the effect on  
6     Apple of having a zero percent fee?

7     **A.** No.

8     **Q.** Yesterday, this Court was told that a major goal of the  
9     analysis was to preserve Apple's business model.

10     You understand that?

11     **A.** Yes, I do.

12     **Q.** Apple's business model for 15 years had been that it  
13     charges for in-app purchases and does not charge anything for  
14     out-of-app purchases, correct?

15     **A.** That is correct.

16     **Q.** So to preserve the model, Apple should have charged zero,  
17     correct? That would be preservation of the model.

18     **A.** Apple charges for the value it provides.

19     **Q.** Sir, Apple provided the same value on the 15th of January  
20     that it did on the 17th. Nothing changed. Correct?

21     **A.** The same value is provided, correct.

22     **Q.** And so the only value -- the only thing that changed was  
23     that Apple woke up on the 16th of January of this year and  
24     decided not to preserve its business model, but to radically  
25     change its business model from charging zero to charging

1 27 percent. Correct?

2 A. I disagree.

3 Q. Okay. How low did you go in the early drafts when you had  
4 a broader range, as you call it?

5 A. I recall looking at a range starting at 15 percent.

6 Q. Did you -- did the range also go to beyond 30 percent?

7 A. Yes.

8 Q. Whose decision was it not to model anything below  
9 15 percent?

10 A. That would have been my decision.

11 Q. What was the basis for that decision?

12 A. At 15 percent, the effective rate was already very low.

13 Q. By effective rate, you mean the blended rate plus all the  
14 assumptions about adoption, et cetera?

15 A. That is correct.

16 Q. Now, the deck doesn't actually state anywhere why the  
17 recommended standard fee is 27 percent as opposed to  
18 20 percent or 25 percent or 30 percent, correct?

19 A. That is correct.

20 Q. For that matter, the price committee deck does not say why  
21 27 percent is better than zero percent or 5 percent or  
22 10 percent, right?

23 A. The materials included here would support the  
24 recommendation.

25 Q. That's not what I asked, sir. What I asked was the deck

1 does not say 27 percent is better than another rate, at any  
2 rate, because of X, Y, and Z, correct?

3 A. The deck does not state that.

4 Q. And it's your testimony that 27 percent is because -- is  
5 better because it reflects the value; is that -- am I  
6 understanding that right?

7 A. That is correct.

8 Q. Your declaration also does not provide any explanation for  
9 choosing 27 percent over any other number, correct?

10 A. That is correct.

11 Q. And in fact, the deck, if we accepted all the assumptions  
12 in it, could easily support 30 or 35 percent, correct?

13 A. It could.

14 Q. And as you said, you analyzed things above 30 percent.  
15 That was in consideration, that was at play.

16 A. Early on.

17 Q. Now, the 27 percent you recommended is the same rate that  
18 Apple has used before in similar contexts, correct?

19 A. That is correct.

20 Q. For example, since early 2022, to comply with an order  
21 from Dutch regulators, Apple allows developers distributing  
22 dating apps in the Netherlands to include an in-app link  
23 directing users to their website and charges 27 percent on  
24 those purchases, correct?

25 A. That is correct.

1 Q. In the Netherlands, Apple presents its commission on  
2 linked purchases simply as a reduction of its typical IAP  
3 commission by three percent, correct?

4 A. That is correct.

5 Q. It didn't do any of the ground-up analysis that you  
6 presented in your deck. It didn't make any assumptions about  
7 adoption, nothing like that, correct?

8 A. It was a much smaller analysis.

9 Q. And the analysis amounted to "We are reducing the fee by  
10 3 percent," correct?

11 A. That is correct.

12 Q. In South Korea, Apple was forced by statute to allow  
13 developers to use an alternative payment solution in their  
14 app, correct?

15 A. That is correct.

16 Q. And following the same playbook it used in the  
17 Netherlands, in South Korea Apple imposed a new 26 percent  
18 commission on the price paid by the user, correct?

19 A. That is correct.

20 Q. And like in the Netherlands, in South Korea the 26 percent  
21 rate was explained by Apple simply as a reduced rate, correct?

22 A. That is correct.

23 Q. And so in both these countries, this was what I would call  
24 a top-down analysis rather than a bottom's-up analysis, right?

25 A. Roughly speaking, that's correct.

1 Q. Now, in your declaration and in the slide deck, the  
2 Netherlands rate for linked purchases is just not mentioned,  
3 correct?

4 A. That is correct.

5 Q. And the South Korea rate is not mentioned anywhere either,  
6 correct?

7 A. That is correct.

8 Q. And it is your testimony, I take it, that the fees you  
9 recommended in the United States had nothing to do with the  
10 identical fees that Apple imposed in the Netherlands.

11 A. That is correct.

12 Q. And instead your testimony is that the linked purchase fee  
13 in the United States is based on this complicated bottom's-up  
14 analysis that we just went through with all its assumptions,  
15 correct?

16 A. That is correct.

17 Q. Now, the bottom's-up assumptions in the price deck is  
18 intended to show that Apple delivers to developers value that  
19 justifies the standard 27 percent fee, correct?

20 A. That is correct.

21 Q. And in your declaration and in the deck, there's no  
22 separate analyses that justifies the 12 percent fee, correct?

23 A. Both of them are part of the same --

24 Q. Sir, there is no analysis that is intended to lead to an  
25 outcome of 12 percent, correct?



1     **A.** That is roughly correct. It's based on the same  
2     proportion.

3     **Q.** Three out of 30 is the same as three out of 15?

4     **A.** From a pricing perspective, you want to have some  
5     symmetry.

6     **Q.** The 12 percent is, in fact, the reduced rate that the deck  
7     recommended, correct?

8     **A.** That is correct.

9     **Q.** And it just so happens to be the reduced fee that Apple  
10    charges on linked purchases in the Netherlands, correct?

11    **A.** That is correct.

12    **Q.** And that too is coincidence.

13    **A.** That is correct.

14    **Q.** So let me just make sure I understand your testimony of  
15    how the 27 percent fee came to be on January 16, 2024.

16           On January 16, 2024 at around 6:30 a.m. Pacific time,  
17    Apple woke up to learn that the Supreme Court ended its  
18    appeal, correct?

19    **A.** That is correct.

20    **Q.** Now, you and your team then finalized your bottom's-up  
21    analysis and made a decision for the first time to recommend  
22    to Mr. Cook and to the price committee a standard fee of  
23    27 percent and a reduced fee of 12 percent, correct?

24    **A.** That is correct.

25    **Q.** And you then presented and explained this complicated

1 analysis that we went through and your recommendation to  
2 Mr. Cook, to Mr. Maestri, and to Mr. Schiller, correct?

3 A. That is correct.

4 Q. Did you personally present it to them?

5 A. Yes, I did.

6 Q. Was that an in-person meeting or over Zoom?

7 A. It was in person.

8 Q. You did not present the effect on total cost to developers  
9 of using the purchase links based on these fees, correct?

10 A. That is correct.

11 Q. And you could not present that because you chose not to  
12 look at one of the cost items, specifically the cost of  
13 obtaining payment solution elsewhere, correct?

14 A. That is correct.

15 Q. You also did not present the effect on developers' ability  
16 to charge and communicate lower prices to users, correct?

17 A. Could you repeat that question?

18 Q. You also did not present to Mr. Cook, Mr. Maestri, and  
19 Mr. Schiller any analysis of how these fees would affect  
20 developers' ability to charge and offer and communicate to  
21 users a lower fee on out-of-app purchases.

22 A. This is embedded throughout the presentation.

23 Q. It's embedded in one slide that says that you believe  
24 there's an 18 percent fee and some unknown payment fee on top  
25 of that that you just have no idea what that is, correct?

1     **A.** Our estimation of adoption takes into consideration some  
2     of these factors.

3     **Q.** I see.

4             So you told them that your estimation is that a vast  
5     majority of developers would actually adopt this even though  
6     you've conducted no analysis of that whatsoever.

7     **A.** We communicated our assumption; that is correct.

8     **Q.** I gather that Mr. Cook, Mr. Maestri, and Mr. Schiller  
9     never asked you to present the effect of your recommendation  
10    on cost to developers?

11    **A.** That is correct.

12    **Q.** And they never asked you to present the effect of your  
13    recommendation on the ability of developers to offer lower  
14    prices to users, correct?

15    **A.** That is part of the discussion.

16    **Q.** Nobody told you, "We think this is incomplete. You should  
17    go out there, figure out what the total cost to developers is,  
18    how that affects their ability to offer lower prices, and then  
19    come back." Correct?

20    **A.** In reviewing the assumptions, we discussed the impact that  
21    this would have --

22    **Q.** Sir?

23    **A.** -- on developers.

24    **Q.** Sir, did anybody tell you this is an incomplete analysis.  
25    Go out there, undertake the analysis of cost to developers of

1 alternative payment solutions that you specifically chose not  
2 to undertake, come back and talk to us when you know that and  
3 have analysis of how that affects cost to developers?

4 **A.** For cost of payments, that is correct.

5 **THE COURT:** Were lawyers there when you presented?  
6 Were lawyers there when you presented?

7 **THE WITNESS:** Your Honor, yes.

8 **THE COURT:** How many?

9 **THE WITNESS:** I do not recall.

10 **THE COURT:** How many people were there?

11 **THE WITNESS:** We had roughly 12 people.

12 **THE COURT:** What time was the meeting?

13 **THE WITNESS:** It was in the morning. I --

14 **THE COURT:** How long did it last?

15 **THE WITNESS:** Roughly 90 minutes.

16 **THE COURT:** Tell me everybody who you remember who  
17 was there.

18 **THE WITNESS:** Mr. Cook, Mr. Schiller, Mr. Maestri,  
19 Mr. Fischer, Mr. Oliver, from my team, Mr. Barton.

20 **THE COURT:** How do you -- say that one again?

21 **THE WITNESS:** B-A-R-T-O-N.

22 **THE COURT:** Okay. Thank you.

23 **THE WITNESS:** Mr. Vij, that is V- as in Victor, I-J.

24 Those were the main people that discussed. And there were  
25 some other people, Your Honor, that I cannot recall at this

1 stage.

2 **THE COURT:** Was anybody on Zoom?

3 **THE WITNESS:** Maybe.

4 **THE COURT:** For the 90 minutes, how long of that  
5 was -- was any part of that 90 minutes a briefing by legal  
6 counsel?

7 **THE WITNESS:** At the very beginning regarding the  
8 injunction.

9 **THE COURT:** And how long did that portion take?

10 **THE WITNESS:** A few minutes, not very long.

11 **THE COURT:** Five, ten?

12 **THE WITNESS:** More or less.

13 **THE COURT:** The balance of the meeting was a business  
14 meeting?

15 **THE WITNESS:** That is correct.

16 **THE COURT:** Who made the legal presentation?

17 **THE WITNESS:** I do not recall exactly. I believe it  
18 would have been Heather from our legal team.

19 **THE COURT:** Okay. Thank you.

20 Proceed.

21 **MR. EVEN:** Thank you, Your Honor.

22 **Q.** Mr. Roman, was the meeting recorded or transcribed in any  
23 way?

24 **A.** No.

25 **Q.** Was it summarized in any way?

1       **A.**   No.

2       **Q.**   So it started at 6:30 a.m. We now have a meeting of about  
3       an hour and a half. Then Mr. Cook, Mr. Maestri, and  
4       Mr. Schiller considered your recommendation and ultimately  
5       approved it, correct?

6       **A.**   That is correct.

7       **Q.**   And I take it in a setting like that, Mr. Cook would be  
8       the decider, correct?

9       **A.**   All of price committee, Mr. Cook, as part of the price  
10      committee, yes.

11      **Q.**   And Apple's lawyers then populated the previously unknown  
12      27 percent figure into Mr. Fischer's ten-page declaration,  
13      into Apple's 16-page notice of compliance, into the updated  
14      addendum to the app developer program license agreement, and  
15      into the new developer support page for the external link  
16      entitlement addendum for the U.S. apps, correct?

17      **A.**   There was a lot of operational and communication tasks  
18      that were undertaken that day, correct.

19      **Q.**   And then at 2:21, less than eight hours after the  
20      Supreme Court announced its decision, Apple's lawyers filed  
21      all of these documents with this Court, correct?

22      **A.**   I do not know. I am not a manager of that process.

23      **Q.**   Okay. If I represent to you it's 2:21, you have no reason  
24      to dispute that, do you?

25      **A.**   I do not.

1 Q. About eight hours to do all that sounds about right?

2 A. That is correct.

3 Q. And by sheer happenstance, a fluke, pure coincidence, the  
4 standard fee that was populated in all these documents and  
5 that you recommended and that Mr. Cook approved and the  
6 reduced fee of 12 percent that was populated and approved and  
7 Apple adopted on that hectic day in January just happened to  
8 be identical to the fees that Apple had imposed in the  
9 Netherlands two years earlier based on an entirely different  
10 analysis. That's your testimony?

11 A. That is correct.

12 MR. EVEN: I have no further questions at this time,  
13 Your Honor. Thank you.

14 THE COURT: Your exam. Who's examining?  
15 Mr. Perry?

16 MR. PERRY: Yes, Your Honor.

17 THE COURT: We'll go for about half an hour,  
18 Mr. Perry, and then take a break.

19 MR. PERRY: Thank you, Your Honor.

20 **CROSS-EXAMINATION**

21 **BY MR. PERRY:**

22 Q. Good afternoon, Mr. Roman.

23 A. Good afternoon.

24 Q. We've heard earlier you're a vice president of finance.  
25 Can you just briefly tell the Court how long you've been at

1 Apple and what you do there in addition to the price committee  
2 work you've been talking about today.

3 **A.** I've been at Apple almost ten years. In my current  
4 capacity, I am a vice president of finance that supports the  
5 services business. In that support, I provide business  
6 controllership, budget, forecast.

7 There's also spend management, profitability improvements,  
8 as well as financial analysis to support strategic and  
9 operational decisions such as pricing, channel or region  
10 expansions, among -- among any other things like commercial  
11 arrangements and new product or feature introductions.

12 **Q.** And do you have a -- a name or a description of what you  
13 call that role that you play with respect to the business  
14 lines within the services unit?

15 **A.** That is correct. We provide business support.

16 **Q.** Business support.

17 And you mentioned pricing. Can you explain generally to  
18 the Court how pricing works at Apple within the services unit?

19 **A.** Services, along with products, we have a process by which  
20 every time that we have a major pricing decision, we establish  
21 a price committee where we provide a -- we summon a price  
22 committee together to make that determination of such price.

23 This price committee usually has a price committee deck or  
24 presentation.

25 **Q.** And does the price committee decks or presentations follow



1 a standardized format at Apple?

2 **A.** Yes, it does.

3 **Q.** Can you explain to the Court what a price committee  
4 presentation generally entails?

5 **A.** It usually has three or four elements. A description of  
6 what is being priced; competitive landscape and benchmarking  
7 analysis of similar or relevant comparable services or  
8 products; and a financial analysis of the pricing options;  
9 sometimes a recommendation is also included in this deck.

10 **Q.** And of those parts of a pricing analysis, what part are  
11 you personally, Mr. Roman, and your team responsible for?

12 **A.** The financial analysis of pricing options is the part that  
13 we undertake.

14 **Q.** And in your time at Apple, is this the first price  
15 committee process you've participated in?

16 **A.** No, it was not.

17 **Q.** Do you have any sense of how many price committee  
18 processes you have participated in?

19 **A.** Over 50.

20 **Q.** Now, you mentioned that you're a vice president of finance  
21 and the Court asked you how many there are. Are there  
22 different finance groups or finance functions within Apple?

23 **A.** Yes, there are.

24 **Q.** Could you explain at a high level the structure of the  
25 finance department within Apple. And next question will be

1 your role in it if you want to keep rolling.

2 **A.** At Apple, within finance, we're roughly structured into  
3 two big segments. One of them is corporate functions and the  
4 other one is business support.

5 Corporate functions include tax, treasury, accounting,  
6 corporate FP&A, investor relations, internal audit, all of  
7 those things that serve as the total enterprise.

8 Business support, these are teams that embed -- that are  
9 embedded across the businesses. And in addition to sharing  
10 responsibility of making sure that financial statements are  
11 accurate and in accordance to accounting guidelines, also  
12 provide budget and forecast, spend management, as well as  
13 financial support for decision-making processes such as  
14 pricing, commercial arrangements, market expansions, new  
15 product introductions.

16 **Q.** Now, you mentioned corporate FP&A. Could you explain what  
17 that is, please.

18 **A.** Corporate FP&A is a team within our finance organization  
19 that measures the performance of the enterprise, actual versus  
20 forecast, does trend analysis. They support external  
21 reporting. They set up targets of spend. They coordinate the  
22 annual plan process. They take a view of the total  
23 enterprise. And that's the way that they try to keep  
24 performance on track.

25 **Q.** And you've mentioned enterprise a few times in that

1 answer. What, in this context, does the enterprise mean,  
2 Mr. Roman?

3 A. That means the totality of Apple.

4 Q. And are you, Mr. Roman, in the corporate FP&A group?

5 A. No, I am not.

6 Q. And when you described two broad functions, one was  
7 corporate functions and the other was business support, you're  
8 in the latter, right?

9 A. I am in business support, correct.

10 Q. Now, you -- were you ever in the product side of Apple?

11 A. Yes, I was.

12 Q. And does products also follow a price -- a pricing  
13 strategy?

14 A. Products also follow a price committee process.

15 Q. And were you involved in any of the product pricing issues  
16 while you were in products?

17 A. Yes, I was.

18 Q. Now, in -- you're now in services, correct?

19 A. That is correct.

20 Q. Could you explain to the Court what major business lines  
21 are within services at Apple?

22 A. In addition to the App Store, services also includes Apple  
23 Music, Apple TV Plus, iCloud, Apple Card, Maps, Siri, among  
24 many others.

25 Q. And for which of those, if any, do you have primary

1 responsibility, Mr. Roman?

2 **A.** I oversee all of them.

3 **Q.** And you mentioned that the App Store is within services;  
4 is that right?

5 **A.** That is correct.

6 **Q.** Now, in your work in business support, Mr. Roman, are  
7 there ever instances in which Apple has occasion to determine  
8 profitability or margins at the individual business line  
9 level?

10 **A.** Sometimes, yes.

11 **Q.** And can you describe some examples of that?

12 **A.** For instance, whenever we launch a new product or service,  
13 we're interested to see if there is a route to profitability  
14 for such services. So we try to provide the best picture that  
15 we can to assess such profitability.

16 **Q.** And what's your process or what -- what's your team's  
17 process for going through that exercise, in general?

18 **A.** We take a look at what we call top of the funnel which is  
19 the initial activity of where customer purchases or certain  
20 income could be generated. And then we take a look at the  
21 cost and the spend structure to support such service. Roughly  
22 the same process given the access that we have to the systems.

23 **Q.** Now, in conducting analysis of new product services or  
24 features, do you always have perfect data or any data at all?

25 **A.** More often than not, we do not have perfect data.

1 Q. And how does your team go about analyzing business  
2 decisions in the absence of perfect data or any data?

3 A. Making decisions with imperfect information is usually  
4 prevalent in this space. We try to use all of the data points  
5 at our disposal and then apply common sense and rationale to  
6 see the ranges of potential outcomes.

7 We also derive sensitivity analysis to understand, if  
8 we're wrong in some of our assumptions, what the impact could  
9 be.

10 Q. And in your job, do you advise the business lines and the  
11 executives at Apple regarding these business decisions or the  
12 financial impact of these business decisions?

13 A. Yes, I do.

14 Q. Now, if we could look, Mr. Roman, at the -- we've been  
15 talking today about the new link entitlement, right?

16 A. Yes.

17 Q. And if we could look at the deck for that.

18 MR. PERRY: And it was -- if we could use,  
19 Mr. Stovall, CX-009A.

20 (Exhibit published.)

21 MR. PERRY: And, Your Honor, this -- if we could not  
22 display this on the public gallery if there are highlighted  
23 pages.

24 This is a version, Your Honor, that instead of having the  
25 redactions completely blacked out, it has highlighting for the

1 confidential information so the Court may see the numbers if  
2 the Court is interested.

3 **THE COURT:** Okay. So you don't want everybody in the  
4 gallery to look at this because A is redacted. I can see it  
5 in my book.

6 **MR. PERRY:** Correct.

7 **THE COURT:** They can't see it in the audience.

8 **MR. PERRY:** I'm -- that's correct, Your Honor.

9 **THE COURT:** And that's what you want, you don't want  
10 them to see it?

11 **MR. PERRY:** Correct, Your Honor.

12 **THE COURT:** Okay. Do not -- do not publish.

13 **THE CLERK:** Yes, Your Honor.

14 Witness will be okay, Your Honor?

15 **THE COURT:** Just for the witness.

16 (Exhibit published to witness, counsel, and the Court.)

17 **BY MR. PERRY:**

18 **Q.** Now, can you explain to the Court -- I know we've been  
19 talking about it, but can we start from the front end,  
20 Mr. Roman, and explain to the Court what is this document, how  
21 was it created, what was your role in it?

22 **A.** This document contains our recommendation and our  
23 supporting summary for the determination of price for the  
24 linkout entitlement.

25 **Q.** And what was your role in preparing this?

1       **A.** In addition to reviewing all of the document, I was --

2               **THE COURT:** Hold on a minute.

3       Mr. Cuenco, what's wrong?

4               **THE CLERK:** I got a request to turn the monitors off,  
5       Your Honor, facing the gallery. Sorry.

6               **MR. PERRY:** Your Honor, we can -- before the break,  
7       this will not come up. We could just leave them on the public  
8       ones. And I don't think it will be an issue. Actually we  
9       can -- we can not put up those screens if it's not necessary.  
10      I don't want to delay the proceedings with monitors, in other  
11      words.

12              **THE COURT:** So...

13              **MR. PERRY:** Okay to publish.

14              **THE COURT:** All right. Then he's saying it's okay to  
15      publish. So go ahead and publish.

16      **BY MR. PERRY:**

17      **Q.** This price committee deck, Mr. Roman, we've had some  
18      discussion this morning about your role, Mr. Oliver's role.  
19      Can you just describe more generally who was involved, the  
20      team, and how -- how the process worked so the Court has an  
21      understanding.

22      **A.** Whenever we have a price committee, we work with a few  
23      teams to provide the best information that we can to price  
24      committee and to the decision-makers.

25              In this case, business management, which is a team that

1 supports the App Store, that is in charge of strategic  
2 planning, business development, and other strategies for the  
3 App Store, works very closely with finance to make sure that  
4 we can generate the proper information for the different  
5 segments.

6 The definition of what is being priced, that's usually  
7 undertaken by business management. The benchmarking  
8 competitive landscape, it's another element that business  
9 management actively provides. From a finance perspective, we  
10 review to make sure that is part of the range. And then the  
11 financial analysis is the portion that finance primarily  
12 undertakes.

13 Q. Now, this particular deck, Mr. Roman, is about 15 slides  
14 long, right? We went through some of those with Mr. Even.

15 A. That is correct.

16 Q. Is that typical for a pricing deck at Apple?

17 A. That is typically the range of the summary.

18 Q. Does that mean, Mr. Roman, that they can be put together  
19 quickly?

20 A. No, they cannot.

21 Q. Could you give the Court a sense of the work that went  
22 into this price committee deck, particularly from your team  
23 and the finance section?

24 A. We spent several months and involved a large segment of  
25 our team. There are thousands of calculations supporting all



1 of these numbers. And we went through several iterations and  
2 reviews to make sure that the numbers represented the best  
3 picture we could.

4 Q. And when you mention your team, how many people, do you  
5 have a sense, Mr. Roman, from finance worked on this price  
6 committee deck?

7 A. Across all of the -- across all of the different segments,  
8 must be over a dozen.

9 Q. And we'll come back to this with specific assumptions, but  
10 you discussed with Mr. Even some of the assumptions that were  
11 made. Do you recall that?

12 A. Yes, I do.

13 Q. And on Wednesday, you mentioned that the assumptions are a  
14 consensus approach. Do I remember that correctly?

15 A. That is correct.

16 Q. Could you just describe for the Court in general -- and  
17 again we'll talk to some specifics -- how the assumptions in  
18 your financial model were arrived at in connection with this  
19 price committee deck.

20 A. As we established the logic flow to derive our  
21 projections, we identified where we needed to make assumptions  
22 to be able to provide our analysis. Each one of those  
23 assumptions was subject to vigorous debate from the different  
24 teams.

25 We used -- tried to use as much information as we could,

1 internal, market, otherwise, and then we try to apply our  
2 judgment to make sure that these assumptions would provide the  
3 most likely outcome.

4 **THE COURT:** So you're telling me that a thousand  
5 people were involved and not a single person of that thousand  
6 said hey, don't you think we should consider the cost of IAP  
7 to a developer? That -- that's what I'm supposed to believe?

8 **THE WITNESS:** Your Honor, we --

9 **THE COURT:** Just yes or no. Am I -- that not a  
10 single person raised that issue of the thousand that were  
11 involved? Yes or no?

12 **THE WITNESS:** No.

13 **THE COURT:** Go ahead.

14 **MR. PERRY:** Thank you, Your Honor.

15 **Q.** Now, in this process, were all of the underlying materials  
16 available to the group that worked on it?

17 **A.** Yes, they were.

18 **Q.** And were they all presented ultimately to the price  
19 committee that made the decision?

20 **A.** Not all of those details were presented to price  
21 committee.

22 **Q.** And why is that?

23 **THE COURT:** And I, you know, I said that probably  
24 wrong. Payment processing. Not IAP. Not a single person  
25 expressed an issue or a concern about the cost of payment

1 processing to a developer, of the thousand?

2 **THE WITNESS:** Your Honor, Your Honor, that did come  
3 up.

4 **THE COURT:** And you said it wasn't important and you  
5 didn't care, it wasn't relevant to the analysis.

6 **THE WITNESS:** After a debate, that's what we  
7 concluded.

8 **THE COURT:** Why not?

9 **THE WITNESS:** As we proceeded through the analysis,  
10 Your Honor, we realized that developers would have to make  
11 several choices in terms of this implementation, the  
12 implementation of the linkout entitlement. That assumption  
13 entails that they would have to enable their own payment  
14 processing.

15 And based on our assumptions and our projections, it was  
16 quick for us to determine that developers would be  
17 incentivized to proceed with such linkout entitlements once  
18 they were -- once they would be able to provide all of the  
19 operational background to make such implementations. Which  
20 means that for payment processing, it would be tremendously  
21 advantageous for developers to enable, to comply with this,  
22 and to bear that cost even if it was, as mentioned before, in  
23 that range.

24 Therefore, what we considered is that from a benchmarking  
25 perspective, for us to align what is the value that the App

1 Store provides, payment processing wouldn't be one of them  
2 because it's not included in the linkout entitlement.

3 **THE COURT:** So you know that people from Apple  
4 testified otherwise. Do you understand that?

5 **THE WITNESS:** I -- I'm not aware.

6 **THE COURT:** Interesting.

7 Proceed.

8 **BY MR. PERRY:**

9 **Q.** Mr. Roman, earlier in response to the Court's question,  
10 you mentioned that the payment processing market is  
11 fragmented. Do you recall that?

12 **A.** Yes, I do.

13 **Q.** Could you explain a little more about that.

14 **A.** There are several options available nowadays for people  
15 that want to obtain payment processing services. Ranges are  
16 wide. These depend on volume.

17 **THE COURT:** But they're not zero. Right? You admit  
18 they're not zero.

19 **THE WITNESS:** That is correct.

20 **THE COURT:** Keep going.

21 **BY MR. PERRY:**

22 **Q.** And you also mentioned, Mr. Roman, that you have -- you  
23 personally have an understanding of the payment processing  
24 market as a result of your work in finance; is that right?

25 **A.** That is correct.

1 Q. And could you explain a little more in response to the  
2 Court's question that the ultimate decision not to include a  
3 payment processing --

4 THE COURT: Do not lead him. Do not lead.

5 MR. PERRY: Yes, Your Honor.

6 Q. Does your financial model that you built include payment  
7 processing?

8 A. It does not.

9 Q. And could you just explain why not.

10 A. For the value that the App Store provides in our analysis,  
11 in a linkout entitlement Apple would not be providing payment  
12 services. Therefore it was not part of the benchmarking of  
13 what Apple would provide.

14 Q. Thank you, Mr. Roman.

15 Now, back to the price committee deck.

16 THE COURT: So are you saying that Apple's processing  
17 of payments in app has zero value?

18 THE WITNESS: In the context of the linkout  
19 entitlement, Your Honor --

20 THE COURT: No. For those who are doing it now, are  
21 you saying that it has no value and therefore you could extend  
22 that? Because it has no value, you didn't have to consider it  
23 for payments outside of the app? You're providing a service  
24 for free for all of these individuals who are using your  
25 payment processing system now.

1           **THE WITNESS:** Your Honor, we believe that their  
2 payment processing does provide value.

3           **THE COURT:** But you don't put any value to it in  
4 terms of subtracting it when someone is no longer using it.

5           **THE WITNESS:** Your Honor, I believe that might be  
6 correct. In the linkout entitlement we would not be providing  
7 with any payment services.

8           **THE COURT:** Do you understand -- maybe I'm not asking  
9 my question right. You can't have it both ways. You can't  
10 say that we're providing you a service that has value when  
11 you're using our payment processing system, and then ignore  
12 that when you are valuing someone else using some other  
13 third-party payment processing system. You ignore it for  
14 purposes of this deck, but you don't ignore it when you're  
15 charging them for the value that they're receiving when they  
16 actually use it.

17           **THE WITNESS:** We did not consider it for purposes of  
18 these calculations, Your Honor, for an impact to Apple other  
19 than their absence in terms of what we provide.

20           **THE COURT:** Because you weren't focused on the  
21 developer, you were focused on Apple's revenues.

22           **THE WITNESS:** That's how we provide the financial  
23 analysis of the options, Your Honor, that is correct.

24           **THE COURT:** I interrupted you, Mr. Perry.

25           **MR. PERRY:** Thank you, Your Honor.

1 Q. Mr. Roman, in evaluating the pricing for the new link  
2 entitlement, what role did the Netherlands entitlement that  
3 Mr. Even asked you about play?

4 A. It did not come up.

5 Q. And you mentioned that the Netherlands issue was a much  
6 smaller analysis; did I get that right?

7 A. That is correct.

8 Q. And can you explain that a little bit.

9 A. The implementation was very narrow. The Netherlands is  
10 not a very large market. And it was narrow to a very specific  
11 app category.

12 Q. Do you recall what category?

13 A. Dating apps, if I am not mistaken.

14 Q. And why did you and the team you've described choose to do  
15 a different approach in the United States?

16 A. The impact is materially larger.

17 THE COURT: Impact on what?

18 THE WITNESS: On our financial performance, Your  
19 Honor.

20 THE COURT: Right. On your bottom line.

21 THE WITNESS: That is correct.

22 THE COURT: I don't see a slide in here about its  
23 impact on your bottom line. Where is that?

24 THE WITNESS: (Reviewing document.)

25 CX-0009.14.

1           **MR. PERRY:** And this is one, Your Honor, we would ask  
2 not to be published to the gallery.

3           **THE COURT:** Okay.

4           Thank you.

5           (Exhibit published to witness, counsel, and the Court.)

6           **BY MR. PERRY:**

7           **Q.** Mr. Roman, since we're here --

8           **THE COURT:** Why don't you take it off the screen.

9           **MR. PERRY:** Thank you.

10          **Q.** Mr. Roman, since we're here could you explain to the Court  
11 what's being shown on that dot 14 slide in brief and we'll  
12 come back to it a little bit later.

13          **A.** For different combination of headline commission rates and  
14 duration windows, each intersection shows the reduction in  
15 annual revenue and the percentage that such revenue would  
16 represent out of that forward projection that we have. This  
17 would be an annual impact.

18          **THE COURT:** And at the time you presented this, what  
19 were the publicly known gross revenues?

20          **THE WITNESS:** We did not disclose the App Store  
21 revenue isolated, Your Honor. It's part of the overall  
22 reporting of services. That is the segment.

23          However, we can take a look at CX-0009.10 to give you a  
24 perspective of the fiscal year '23 figures, Your Honor.

25          **THE COURT:** Okay. Thank you.



1 You can continue, Mr. Perry.

2 **MR. PERRY:** Thank you, Your Honor.

3 **Q.** On .10, can you just explain to the Court what's being  
4 shown here in general? And again we'll come back to it in  
5 more detail, Mr. Roman. And let's look at the U.S. column  
6 just to focus the --

7 **A.** Correct.

8 This schedule had multiple purposes. It was meant to  
9 provide a baseline upon we which arrived [sic] the financial  
10 impact. It would show also our best estimation or  
11 approximation of how much margin there is which is an  
12 important consideration to understand the magnitude of the  
13 impact.

14 And finally to show, potentially to a lesser degree of  
15 importance, the total picture of the App Store from customer  
16 purchases all the way to margin for Apple.

17 **Q.** And just to focus on the revenue question the Court asked  
18 about, you see that line, Mr. Roman?

19 **A.** That is correct.

20 **Q.** Are those -- are those numbers actual or projections?

21 **A.** These numbers are actuals.

22 **Q.** And for what year?

23 **A.** Our fiscal year '23 which would have ended in September of  
24 last year.

25 **Q.** Thank you, Mr. Roman.

1 As I said, we'll come back to those slides. If we could  
2 go back to the beginning of the price committee deck.

3 Now it's dated, Mr. Roman, January 16th.

4 Mr. Even suggested that it is -- was everything done on  
5 January 16th?

6 **A.** No, it was not.

7 **Q.** And how long before did this begin; do you recall?

8 **A.** So the best of my recollection, sometime in the summer of  
9 2023 we started in earnest the analysis, potentially even a  
10 little sooner.

11 **Q.** And if we turn to the first slide of the deck, Mr. Roman,  
12 I think you were asked on Wednesday who made this  
13 recommendation; do you recall that?

14 **A.** Yes, I do.

15 **Q.** And I'm not sure you were able to answer. Could you  
16 explain a little more about who made the recommendation.

17 **A.** Taken into consideration all the materials, the business  
18 management team, finance team combined, we try to put the best  
19 recommendation forward. Our business management team and  
20 Mr. Oliver, they led the recommendation.

21 **Q.** Was the recommendation the subject of discussion before  
22 January 16th?

23 **A.** Yes, it was.

24 **Q.** And can you explain a little bit about that.

25 **A.** For a long period of time, we debated the several options

1 that we had for pricing this linkout entitlement. There's  
2 implications on operational teams, on all of our reporting  
3 infrastructure, and the things that we needed to communicate.  
4 Taking all of that into consideration, we tried to have  
5 meetings and reviews ahead of time to provide pieces of the  
6 analysis and to make sure that we were on the right track.

7 **Q.** Mr. Roman, the price committee deck contains several  
8 slides relating to the analysis group valuation studies; do  
9 you recall that?

10 **A.** I do.

11 **Q.** Can you explain from your perspective in finance the role  
12 of the analysis group and these -- this part of the deck, at a  
13 high level.

14 **A.** The analysis group was commissioned by our business  
15 management team to provide an overview of the competitive  
16 landscape the benchmarking for the services provided of what  
17 we were going to price.

18 **Q.** And what role, if any, did the benchmarking portion play  
19 in the finance group's analysis that you led?

20 **A.** To help us understand the range of pricing options.

21 **Q.** Mr. Roman, let's -- let's go to the slide --

22 **THE COURT:** It now looks like you're switching gears?

23 **MR. PERRY:** Yes, Your Honor.

24 **THE COURT:** All right. Why don't we go ahead and  
25 take our break. 2:00 to 2:15.

**MR. PERRY:** Thank you, Your Honor.

**THE COURT:** Court is in recess.

(Recess taken at 2:02 P.M.; proceedings resumed at 2:15 P.M.)

**THE COURT:** All right. Back on the record.

Have a seat. The record will reflect the parties are present. The last session between me and going outside for some fresh air, Mr. Perry.

Proceed.

**MR. PERRY:** Thank you, Your Honor.

Q. Mr. Roman, we were discussing the price committee deck, and I'd like to direct your attention to the App Store ecosystem indicative P&L which is on .10 of the exhibit.

Do you have that?

**A.** Yes, I do.

(Exhibit published.)

BY MR. PERRY:

**Q.** Can you explain to the Court what an indicative P&L is?

**A.** This means that this is an approximation, an estimate of profit and loss. In the case of the App Store, we had to build one given that this is not available in normal course.

Q. Now, the Court heard some evidence at the trial about some other P&L's for the App Store. Are you aware of that?

**A.** Yes, I am.

Q. And can you explain the relationship, if any, between the

1 document you created and those other documents?

2 **A.** Different teams have provided profit and loss estimates  
3 for the App Store. There is also a difference in what  
4 elements are included in such P&L's. There are versions that  
5 do not include any of the allocated expenses. There are  
6 versions, as I've been made aware, that have attempted to do  
7 some of these allocations in the past. This particular one is  
8 more fit for purpose for this analysis.

9 **Q.** And by "this analysis," what do you mean?

10 **A.** For the pricing committee deck.

11 **Q.** And did you base this indicative P&L on some preexisting  
12 document, or how did it come to be?

13 **A.** We developed this document and we developed this schedule  
14 with all of the financial information we possess, but we did  
15 not base it on prior analysis.

16 **Q.** What was your goal, Mr. Roman, in putting together this  
17 indicative P&L for the price committee deck?

18 **A.** First, it was to provide a baseline for comparison  
19 purposes, understanding the starting point of our analysis.

20 Second, it was to provide a full view of the App Store  
21 from customer spend all the way to our operating margin.

22 And third, in outlining revenue, the adjusted gross margin  
23 and the operating margin, to highlight those levels, to put in  
24 context for the financial impact that would later be  
25 presented.

1 Q. And you mentioned customer spend. Can you explain what  
2 that means?

3 A. This is reflected at the very top which is App Store  
4 billings.

5 Q. And what is that? What is that number? Where does it  
6 come from?

7 A. All of the purchases made by customers through the App  
8 Store.

9 Q. And why does Apple measure the billings or customer spend?

10 A. For the App Store, I believe it's our primary metric to  
11 understand activity and to understand performance.

12 Q. Why is that?

13 A. This is what reflects all of the customer transactions,  
14 and this is what reflects all of the monetization that is  
15 flowing through the App Store.

16 Q. And in your indicative P&L, Mr. Roman, .10, are the App  
17 Store billings, are these actuals or projections?

18 A. These are actuals for fiscal year '23.

19 Q. Okay. And can you just explain to the Court what  
20 deductions are made from -- what comes next in the analysis?

21 A. The next row is called developer payouts. This is the  
22 portion of App Store billings that go to developers.

23 The next row is called contra revenue which are  
24 adjustments that we make such as delinquency, chargebacks, or  
25 gift card costs and reseller margins.

1 That leads to revenue which is just a sum of the lines  
2 above.

3 Q. If I can pause you there, are these actual figures or  
4 estimates that you're working with?

5 A. These are actual figures.

6 Q. Okay. And the revenue line the Court asked you about  
7 earlier, can you just explain what that reflects for the App  
8 Store business?

9 A. This would be the revenue that we would record for this  
10 business.

11 Q. What do you mean by record?

12 A. This is the amount that would appear in our financial  
13 statements or would be considered for the elaboration of our  
14 financial statements.

15 Q. And is that sometimes called net revenue?

16 A. That is correct.

17 Q. What happens next in your analysis of the indicative P&L,  
18 Mr. Roman?

19 A. We have another couple of deductions. One of them is  
20 other cost of goods sold. These represents infrastructure,  
21 engineering, product design costs that could be attributed to  
22 the product.

23 The next line is credit card fees which is the cost of  
24 networks and financial institutions regarding the credit card  
25 purchases of customers referred above, and that leads to

1 adjusted gross margin.

2 Q. And are those figures actuals or estimates?

3 A. These figures are actuals.

4 Q. And what business purpose or financial planning purpose,  
5 if any, does the adjusted gross margin play, Mr. Roman?

6 A. This is an important metric as it provides a good sense  
7 for us of what is the first line of profitability for the App  
8 Store before we make further deductions on other costs that  
9 sometimes could be fixed or more operational in nature.

10 Q. And is that the next set of calculations?

11 A. That is correct.

12 Q. And could you describe those for the Court, please.

13 A. The next row is called "Direct Operating Expenses" which  
14 are, roughly speaking, people-related cost, marketing, and  
15 professional services that are associated with the App Store.

16 Q. And is direct op ex, is that an estimate or an actual?

17 A. It is an actual. It does have some level of allocation,  
18 but those allocations, we have good allocation keys to make  
19 them.

20 Q. Okay. What comes next in the analysis, Mr. Roman?

21 A. We have two rows to express research and development and  
22 general and administrative expenses that are held at the  
23 enterprise level. We have attempted to apportion to the App  
24 Store the relevant part.

25 Q. And those both say allocated. What does that mean?



1     **A.** That means that we do not have a direct observation and we  
2     have to work with a broad allocation key.

3     **Q.** And is there a -- how do you do the allocation of R&D and  
4     G&A as a financial modeling exercise?

5     **A.** Given that we do not have a direct observation, we created  
6     a couple of methodologies to make those assessments.

7     **Q.** Is there one accepted way in the -- in the world of  
8     finance or financial modeling to allocate these kinds of  
9     expenses?

10    **A.** No, there is not.

11    **Q.** Why not? Do you know why that is?

12    **A.** It's very complex. The underlying information is kept at  
13    an aggregated basis. Many of these are joint expenses that  
14    are not kept for a specific business line.

15    **Q.** And who performed the allocation on these two lines of the  
16    indicative P&L, dot ten?

17    **A.** I did. My team did.

18    **Q.** And did you explain the methodology that you used  
19    somewhere?

20    **A.** Yes. That is provided in the following page.

21    **Q.** Okay. We'll get to that.

22           And so these are, I think it was clear from your answer,  
23    but these two numbers are actuals or estimates?

24    **A.** They are estimates.

25    **Q.** Are they accurate?

1           **THE COURT:** They're estimates.

2           **THE WITNESS:** They would not be precise.

3           **BY MR. PERRY:**

4           **Q.** Thank you.

5           And then the product, Mr. Roman?

6           **A.** Once we performed that allocation, we have an operating  
7           margin -- an indicative operating margin in this page.

8           **Q.** And without saying the number out loud, can you tell the  
9           Court what does that number, for example, under U.S. method  
10          one, what does that number, the dollar number, represent for  
11          purposes of modeling the App Store business?

12          **A.** It's the baseline profit that the App Store would generate  
13          in a year.

14          **Q.** And for what business planning purposes do you, Alex  
15          Roman, use that operating margin dollars?

16          **A.** We used it as a base to project one and two years out what  
17          would be the profitability of the store and as a basis of  
18          comparison for the alternatives that we explored.

19          **Q.** Now, below both gross margin and operating margin dollars,  
20          there are some percentages. Do you see that?

21          **A.** Yes, I do.

22          **Q.** And can you explain to the Court what those represent?

23          **A.** Those are the proportion of adjusted gross margin and  
24          operating margin respectively as a ratio to App Store  
25          billings.

1 Q. Now, you're aware that Mr. Barnes, who's here today, has  
2 criticized your calculation in this respect; is that right?

3 A. Yes, I am.

4 Q. And do you understand what the criticism is?

5 A. Yes, I do.

6 Q. Can you explain it to the Court what the issue is here  
7 with regard to these calculations?

8 A. From an external reporting and GAAP accounting  
9 perspective, billings is not part of such reporting.  
10 Therefore a more accounting-compliant calculation would be to  
11 calculate these percentages on revenue.

12 Q. And can you explain if that calculation could be made  
13 based on the data presented on your chart?

14 A. It can.

15 Q. Now why did you choose to use -- or did you choose to use  
16 billings rather than revenue?

17 A. I did.

18 Q. And can you explain to the Court the basis of that choice?

19 A. To represent what is the margin of the store as a store,  
20 as a business, starting with total customer spend.

21 Q. Now, Mr. Barnes suggests that this is not compliant with  
22 GAAP. Do you recall that?

23 A. I do.

24 Q. Do you agree or disagree with him?

25 A. I agree with him.

1 Q. And are your financial models built on GAAP principles in  
2 general?

3 A. They are not.

4 Q. And why is that?

5 A. For estimate and for projection purposes, we try to focus  
6 on economic value. Sometimes such estimates are different  
7 than GAAP.

8 Q. And can you give an example of how that would work in the  
9 real world?

10 A. In this same page, credit card fees are usually reflected  
11 as operating expenses. That's the way that they are captured  
12 in our disclosed and audited financial statements.

13 For purposes of this analysis, I believe that this is  
14 closer to product cost, and hence it is better to reflect it  
15 here as it would drive differences in scenarios more  
16 appropriately.

17 Q. And is this the first time you've departed from GAAP in  
18 creating a financial model?

19 A. No, it is not.

20 Q. Now, Mr. Roman, are you aware that the Court previously  
21 found that Apple -- Apple's financial planning and analysis  
22 team tracks revenues, fixed and variable costs, allocation of  
23 IT and R&D and overheads to an App Store P&L statement?

24 A. I am aware.

25 Q. And do you understand what the financial planning and

1 analysis team is in that statement?

2 A. Yes.

3 Q. Can you explain what that is?

4 A. This is the corporate FP&A team.

5 Q. And have you reviewed some of the P&L's created by the  
6 corporate FP&A team?

7 A. Yes, I have.

8 Q. Did you use any of those P&L's as the basis for the P&L  
9 you created for the price committee?

10 A. I did not.

11 Q. Why is that?

12 A. The information and the visibility that we have for the  
13 App Store is better for purposes of this analysis.

14 Q. And what do you mean by "better"?

15 A. We have more granular information regarding direct  
16 expenses, as well as a better sense of how the App Store  
17 operates which is based on billings.

18 Q. Mr. Roman, you mentioned a moment ago that the allocation  
19 methodology was on the next slide; is that right?

20 A. That is correct.

21 Q. And this is for what's sometimes called joint or fixed  
22 costs; is that right?

23 A. That is correct.

24 Q. Okay. Let's turn to that. It's Slide .11.

25 (Exhibit published.)

1 **BY MR. PERRY:**

2 **Q.** And can you just explain very briefly, Mr. Roman, what --  
3 what's happening here and -- and if we could focus on either  
4 method because I think you have two.

5 **A.** We have a description of the different cost segments and  
6 the different groups that are included in direct research and  
7 development, general and administrative expenses.

8 We also list expenses that we excluded from this analysis.  
9 And the different methodologies have estimates of what portion  
10 of such expenses could be attributed to the App Store.

11 **Q.** And who made these assumptions or allocations?

12 **A.** I did.

13 **Q.** And --

14 **THE COURT:** All right. Why don't we -- I don't know  
15 if you're going to go through them or not, but is there an  
16 explanation of what these initials stand for in this deck?

17 **MR. PERRY:** There is not, Your Honor. Would you like  
18 that from the witness?

19 **THE COURT:** Well, you have -- you've redacted it. So  
20 I take it you don't want that list known? And is there a  
21 basis for sealing that list?

22 **MR. PERRY:** So the issue is this, Your Honor. As a  
23 confidentiality matter, R&D and G&A are reported at that level  
24 in the public financial statements.

25 How Apple breaks out those two -- which are well

1 recognized categories. How Apple breaks them out by what's  
2 called your group, right, by function or type is not public  
3 and maybe competitively sensitive because it give insight into  
4 the way Apple maintains its business. As Mr. Roman indicated,  
5 these are kept at the enterprise level, the corporate level,  
6 not at the business line unit which is why the allocation was  
7 necessary. So the business considers these -- the breakdown,  
8 if you will, to be confidential.

9 We could certainly provide to the Court a glossary of --  
10 well, I should ask the witness that question, but we could  
11 certainly provide a breakdown of what those are by -- by name  
12 rather than initials if the Court would find it helpful.

13 **THE COURT:** I'd appreciate that.

14 **MR. PERRY:** Thank you, Your Honor. We'll do that.

15 **Q.** Mr. Roman, without specifying, you know, the types, can  
16 you just explain to the Court generally what we will be  
17 providing the explanations of. What are these groups?

18 **A.** For instance for R&D, these are all of the different teams  
19 at Apple that perform R&D functions. And this is outside of  
20 services. Some of these include teams on specific projects,  
21 specific technologies, or specific organizations.

22 **Q.** And do the acronyms that you have listed on your -- your  
23 slide have meaning within Apple?

24 **A.** Yes.

25 **Q.** And is that something we could unpack, if you will, for --

1 for informational purposes?

2 **A.** Yes, we can.

3 **Q.** Okay. And just to make clear the Court's question,  
4 because I answered it too quickly, do the definitions of the  
5 acronyms appear in the deck itself?

6 **A.** They do not.

7 **Q.** And is there a reason for that?

8 **A.** Within Apple and for price committee, they would be  
9 understood.

10 **Q.** These are Apple terms, if you will?

11 **A.** Yes, they are.

12 **Q.** Okay.

13 **MR. PERRY:** Your Honor, would it be acceptable to  
14 submit that at the end of the day, a list of those?

15 **THE COURT:** That's fine. We'll see where we are. I  
16 don't know if Mr. Even has any questions, but they're  
17 meaningless to me unless I have the actual names.

18 So go ahead.

19 **MR. PERRY:** Thank you, Your Honor.

20 **Q.** Mr. Roman, between method one and method two, can you  
21 explain the difference for the Court.

22 **A.** For method one, this is a very simple allocation where we  
23 have taken the proportion of billings into the total Apple  
24 gross of revenue to indicate as a measure the level of  
25 intensity that that would provide.



1 Q. And there's a percentage figure stated there. What does  
2 that reflect in your financial model?

3 A. It would be the proportion of each one of these categories  
4 that would go into R&D allocated and G&A allocated.

5 Q. And there's one percentage for method one. Why is that?

6 A. This is the simplest way that we could find to provide a  
7 sense of the App Store in the sense of the total.

8 Q. And method two is different how, Mr. Roman?

9 A. Method two is comprised of individual assessments by the  
10 people that we consulted to assign what percentage of that  
11 specific group's activity could relate to the App Store.

12 THE COURT: What are the other -- so it's the App  
13 Store compared to what? Hardware? What are the other  
14 ecosystems?

15 THE WITNESS: For Apple, you would find iPhone, iPad,  
16 Mac, wearables, home and accessories, and then the other  
17 services me honor [sic] -- Your Honor.

18 BY MR. PERRY:

19 Q. So, Mr. Roman, in the Apple enterprise financial  
20 statements, how are these joint costs reported; do you know?

21 A. They are all grouped together as R&D or G&A.

22 Q. And are they separated by products and services?

23 A. They are not.

24 Q. Mr. Roman, who -- who came up with method two for purposes  
25 of this allocation?

1       **A.** We did.

2       **Q.** And by "we," you mean...?

3       **A.** The finance organization, yes, my finance team.

4       **Q.** And why did you include in this price committee deck a  
5 slide showing the allocation assumptions for these costs?

6       **A.** To illustrate the range. Given that it is not a precise  
7 calculation, we wanted to have two indications to see if they  
8 were too far apart, to see if our estimates are more or less  
9 in line.

10      **Q.** And if you turn back to the indicative P&L which is page  
11 .10, what conclusions from a financial modeling perspective  
12 did you draw between method one and method two?

13      **A.** It gave us some comfort that with two different  
14 methodologies, we were roughly in the ballpark of what this  
15 allocations for research and development and G&A, and general  
16 and administrative, expenses could be driving for the App  
17 Store.

18      **Q.** And between the two -- did you use one method or the other  
19 for the analysis and the rest of the model?

20      **A.** We did not.

21      **Q.** Mr. Roman, on Wednesday, Mr. Even asked you about the  
22 Court's findings that the App Store P&L prepared by corporate  
23 FP&A indicated an operating margin of over 75 percent for  
24 fiscal year 2019.

25               Do you remember that?

1       **A.** I do.

2       **Q.** And your answer was, quote, "It's irrelevant for this  
3 analysis."

4           Do you remember that?

5       **A.** I do.

6       **Q.** And I think you were cut off at that point. Would you  
7 like to explain to the Court why you hold that view?

8       **A.** The creation of that P&L was for a different purpose. The  
9 main goal for corporate FP&A is not to support pricing  
10 decisions.

11       **Q.** Why would a pricing decision have a different approach  
12 than a corporate FP&A approach?

13       **A.** Corporate FP&A needs to represent all information at the  
14 enterprise level. In other words, all estimates and all  
15 reporting will conform to the total so that the numbers could  
16 be compared across.

17       **Q.** And did you prepare this indicative P&L to be compared  
18 across business lines?

19       **A.** No, I did not.

20       **Q.** And if you could turn to the next slide again, .11,  
21 which was your assumptions, right?

22       **A.** (Reviewing document.)

23       **Q.** Could you read for the Court that little tiny footnote in  
24 the bottom left corner, Mr. Roman?

25       **A.** Financial assumptions?

1 Q. No, I'm sorry. Dot 11.

2 A. Oh.

3 Q. The indicative P&L allocation assumptions.

4 We can blow it up on the screen for you, sir.

5 A. Created for pricing analysis.

6 Q. And why did you include that in your allocation  
7 assumptions in indicative P&L?

8 A. So that it would not be confused for any corporate  
9 purposes.

10 Q. Shifting gears, Mr. Roman, if we could turn to the next  
11 slide in your price -- in the price committee deck, which is  
12 .12 which is entitled "Projected Effective Commission on  
13 Entitlement Transactions."

14 And you recall Mr. Even asked you some questions about  
15 this, right?

16 A. Yes, I do.

17 Q. If we could start at a high level, and you -- just  
18 proceeding through your model, we have an indicative P&L with  
19 the assumptions. This is the next slide, right?

20 A. That is correct.

21 Q. Why is that? What -- what are you presenting to the  
22 company with respect to the model?

23 A. This was the most complicated part of the analysis. This  
24 is where we spent potentially the most time to derive.

25 After starting with the baseline P&L, we estimated that

1 enabling all of these changes would take time for developers.

2 We estimated that that would take around a couple of years.

3 We projected our P&L out a couple of years starting with  
4 billings. And then we overlaid assumptions to understand what  
5 would be developer adoption and then customer adoption of the  
6 linkout entitlement.

7 Then we ran a series of calculations to understand what  
8 would be that effective commission rate as a percentage of  
9 billings that would actually take place in each one of these  
10 intersections.

11 Q. And to be clear, when you say effective commission rate,  
12 you mean the effective commission rate to Apple, right?

13 A. That is correct.

14 Q. And if, for example, the effective commission rate to  
15 Apple is 18 percent, did you analyze what the effective  
16 commission rate to a developer would be?

17 A. We assumed that it would be similar.

18 Q. Now, we'll get to the assumptions in a minute. But why,  
19 Mr. Roman, did you include this slide calculating the  
20 effective commission rate?

21 A. Given that the headline rates are 20 to 30 percent, there  
22 is an impact from the duration window that needs to be  
23 understood that would reduce such headline rate. It was  
24 important for us to outline that impact.

25 Q. And I think Mr. Even touched on this. Where did the

1 ranges on this slide come from, Mr. Roman?

2 **A.** This was based on our competitive analysis and  
3 benchmarking provided previously.

4 **Q.** Now, can you explain just in common sense why -- why the  
5 effective commission rate would be less than the headline  
6 commission rate? Is it just a matter of averaging the 27 and  
7 the 12?

8 **A.** It has a few additional elements. For purposes of this  
9 analysis and with the baseline that we had established, we had  
10 an estimate of the total billings and the associated revenue  
11 and commissions that Apple would be able to charge. Providing  
12 these change, providing these linkout entitlement and with  
13 this pricing, those numbers would differ.

14 Developers would only pay for transactions happening in  
15 these windows. All subsequent transactions would not generate  
16 an additional commission. And that is the main reason why  
17 these numbers would be lower.

18 **Q.** And so for --

19 **THE COURT:** That's only with respect to a single  
20 click, correct?

21 **THE WITNESS:** For each click. You're correct, Your  
22 Honor.

23 **BY MR. PERRY:**

24 **Q.** And for the adopted rate of 27 percent and a seven-day  
25 window, what did you calculate as the effective commission

1 rate, Mr. Roman?

2 A. For that intersection, it is approximately 18 percent.

3 Q. And then at the bottom, there is a couple of assumptions,  
4 right?

5 A. Yes.

6 Q. Could you explain those to the Court, please.

7 A. The first assumption is that roughly half the customers  
8 would come back and tap or click on those links, which means  
9 that not all of the transactions would actually occur outside  
10 of that window. Or that customers would come back, tap again,  
11 and reset the clock.

12 The second is that for purposes of calculating the  
13 effective commission, we did not take into account that there  
14 could be, for Apple, collection or measurement risk.

15 Q. What does that mean, Mr. Roman, collection or measurement  
16 risk?

17 A. That means that now Apple has to collect from developers  
18 these amounts.

19 Q. And what's the risk part of that?

20 A. Developers could be late in payments. Developers now have  
21 to measure that with their own systems, and their systems  
22 might not be accurate, they might be underreporting.

23 Q. And those are not included in these effective commission  
24 rates, right?

25 A. Not on this page.

1 Q. All right, Mr. Roman. The next page, .13, is entitled  
2 Projected Effective Commission on Entitlement Transactions.

3 Do you have that?

4 A. Yes, I do.

5 (Exhibit published.)

6 BY MR. PERRY:

7 Q. Now, can you just explain -- we jumped right into it  
8 earlier. Can you explain at a higher level what is this and  
9 what relation, if any, does it have to that matrix we were  
10 just looking at?

11 A. This is an example for 27 percent and a seven-day window  
12 of how the 18 percent would come about. It provides a dollar  
13 projection and it provides the percentage that underpins the  
14 number in the previous slide.

15 Q. And can you just walk the Court briefly through the  
16 analysis or model that you created to make that calculation.

17 A. The first row is entitlement billings. We estimated at a  
18 granular level two years in the future what percentage of all  
19 billings would go through the linkout entitlement, making  
20 assumptions on developer adoption or implementation as well as  
21 the rate at which customers would tap on such linkout  
22 entitlement.

23 Q. And you list some of those assumptions on this slide,  
24 right?

25 A. That is correct.



1 Q. And we'll unpack those a little bit. Can you explain the  
2 analysis, you know, with the assumptions, and then we'll talk  
3 about how you get to the assumptions; is that all right?

4 A. Yes.

5 Q. Okay. So we have entitlement billings. What happens  
6 next?

7 A. Next we calculate what would be the commission on the  
8 totality of the entitlement, in other words, if there was no  
9 duration window. Next --

10 Q. Well, can I pause you on that one.

11 You see the projected -- you have dollars and then  
12 projected effective commission percentage for that line for  
13 the first time. Can you explain how -- where that's derived  
14 from?

15 A. These would be derived out of the application of the  
16 headline rate for -- applied on the entitlement billings  
17 above, this would be the 27 percent.

18 Q. And why is it lower than that headline rate?

19 A. It is because we have programs as well.

20 Q. And what do you mean by that?

21 A. These programs assume that for small business program, for  
22 instance, we would also have a lower headline commission.

23 Q. Why -- well, that number is pretty close to the headline  
24 rate, right?

25 A. That is correct.

1 Q. And why is that if we have these other programs -- if  
2 Apple has these other programs?

3 A. These programs in relation to the total billings are not  
4 that large.

5 Q. Do you have any sense in putting this together, Mr. Roman,  
6 of the number of developers or -- or the developer population  
7 that drives billings on the App Store?

8 A. One measure that I have used in the past is that --  
9 (Phone interruption.)

10 THE COURT: All right. Whose phone is on?  
11 Go ahead.

12 THE WITNESS: One measure that I have used in the  
13 past is that roughly our top 200 developers have almost  
14 three-quarters of the billings on the App Store.

15 BY MR. PERRY:

16 Q. And what commission rate do those 200 developers generally  
17 pay; do you know?

18 A. The vast majority would be paying 30 percent today.

19 Q. Under the IAP regime?

20 A. On their IAP, correct.

21 Q. Okay. So the second line -- back to your chart,  
22 Mr. Roman, .13, the commission on 100 percent of entitlement  
23 billings, we have a dollar and then an effective rate, right?

24 THE COURT: I take it that those 200 top developers  
25 compete with Apple? Do they have space -- or are they

1 occupying or are they in categories of apps that compete with  
2 Apple's own apps?

3 **THE WITNESS:** Some of them might, Your Honor.

4 **THE COURT:** Do you have -- the number 200 is a  
5 relatively specific number. Do you have a list?

6 **THE WITNESS:** I do have a list. It's not part of  
7 this deck.

8 **THE COURT:** And do you put them -- those 200 that  
9 you've identified, on your list are there categories?

10 **THE WITNESS:** Yes, there are.

11 **THE COURT:** How many categories are there?

12 **THE WITNESS:** There's many categories, Your Honor.  
13 For instance, you have the gaming category. That's a big  
14 category. You would have --

15 **THE COURT:** Of the 200, how many do you think are in  
16 the gaming category?

17 **THE WITNESS:** I do not recall, Your Honor.

18 **THE COURT:** I'll tell you what. I'd like to see the  
19 list. We won't finish with you today, I'm sure.

20 Go ahead.

21 You can bring it next time.

22 **MR. PERRY:** Yes, Your Honor.

23 **THE COURT:** Proceed.

24 **BY MR. PERRY:**

25 **Q.** Mr. Roman, the projected effective commission percentage,

1 I think Mr. Even asked you if that was a blended rate. Do you  
2 know what a blended rate is?

3 A. Yes, I do.

4 Q. And what -- how would you describe a blended rate?

5 A. This would be the weighted average of the different  
6 headline commission rates.

7 Q. And is this a blended rate in that, using that  
8 description?

9 A. That is correct.

10 Q. And what does "weighted average" mean in that definition  
11 you just gave?

12 A. It would be all of the billings multiplied by the  
13 commission rate, divided by -- or each billings by developer,  
14 multiplied by its headline commission, divided by all of the  
15 billings.

16 Q. And by "billings," do you mean the same way you used  
17 billings on your indicative P&L?

18 A. That is correct.

19 Q. What is the next line and -- and the Court asked us to use  
20 blocks. I apologize. So entitlement billings was column --  
21 or row 1. Commission on 100 percent is row 2. And then row 3  
22 is loss due to lower billings and seven-day attribution  
23 window.

24 Could you explain to the Court what you were calculating  
25 there?

1     **A.** These would be all of the commissions that would not go to  
2     Apple given that the transactions would happen outside of the  
3     window.

4     **Q.** And if they don't go to Apple, what happens to them?

5     **A.** They would stay with developers.

6             **THE COURT:** I still don't understand where you get  
7     this number.

8             What is the -- it appears to -- yeah, where is the data to  
9     support this number?

10            **THE WITNESS:** Your Honor, the data that we have for  
11     this particular row is that we know from customer -- whenever  
12     customers initiate purchases, how many of these purchases take  
13     place in these different windows of time, in one day, three  
14     days, seven days, 30 days, what proportion, for all of our  
15     transaction businesses, our subscription businesses.

16            Leveraging that data, we have a good line of sight into  
17     how many transactions would happen outside of this window.

18            **THE COURT:** Who is the person most knowledgeable  
19     about the detail of this seven-day window?

20            **THE WITNESS:** Of the calculation of this number?

21            **THE COURT:** Who is the person most knowledgeable  
22     about the data that supports the seven-day window?

23            **THE WITNESS:** This would be our analytics team, our  
24     data analytics team, Your Honor.

25            **THE COURT:** Is there a person who is in charge of the

1 data analytics team?

2 **THE WITNESS:** Yes, there is.

3 **THE COURT:** Who?

4 **THE WITNESS:** His name is Ayman Khalil.

5 **THE COURT:** Okay. And how do you spell that?

6 **THE WITNESS:** Last name is K-H-A-L-I-L.

7 **THE COURT:** And first name?

8 **THE WITNESS:** A-Y-M-A-N.

9 **THE COURT:** Thank you.

10 Proceed.

11 **BY MR. PERRY:**

12 **Q.** Mr. Roman, in your answer to the Court's question, you  
13 have -- you said you have -- Apple has visibility into  
14 transactional data.

15 Could you explain a little more about what you mean by  
16 that?

17 **A.** For this particular analysis, we have granular data in  
18 terms of each transaction completed by a customer. And we  
19 have the frequency of such transactions as well.

20 Based on the cadence of frequency or the frequency of such  
21 transactions, we know after a person would click or tap, for  
22 instance, an in-app purchase, how much time would pass before  
23 they tap or click again.

24 **Q.** And did you and your team use that data in some way in  
25 creating the summary table at page .13?

1       **A.** Yes, we did.

2       **Q.** And can you explain how the data got from data analytics  
3       into finance and what -- what you, Alex Roman, and your team  
4       did with it?

5       **A.** We summarized the data in terms of each different window,  
6       the percentage of, let's say, annual transactions that happen  
7       in one day and across each time duration window.

8               And we deployed that to understand what portion of  
9       commissions would actually be with Apple under this analysis,  
10      which means that the remainder, the portion that would be  
11      outside of this window is the number that would be reflected  
12      here, aggregated for all of the different app categories.

13      **Q.** And why didn't you just -- well, strike that.

14             Doing that analysis, how did it lead to this number, to  
15      come back to the Court's question. In other words, how was  
16      the number derived from the date analysis project you just  
17      described?

18      **A.** With the results of that analysis, we had percentages.  
19      Those percentages for each one of those windows would tell us  
20      which portion of the commission on 100 percent of entitlements  
21      would happen inside the window and outside the window. And  
22      those percentages were the ones that we used for this  
23      analysis.

24      **Q.** And do you have any recollection, Mr. Roman, of the size  
25      of this data set or the number of observed transactions or any

1 kind of the -- the size of the box, if you will?

2 **A.** It is very large.

3 **Q.** How large?

4 **A.** There are billions of transactions.

5 **Q.** And how does your team work with a data set like that?

6 **A.** We rely on our data analytics teams, who have tools and  
7 the right equipment to be able to process large data like  
8 that.

9 **THE COURT:** I'm assuming that when they report -- did  
10 he report to you, Mr. Khalil and his team?

11 **THE WITNESS:** They do not, Your Honor.

12 **THE COURT:** How did they give you the information  
13 that led to what you put in this document?

14 **THE WITNESS:** We work closely together, Your Honor.

15 **THE COURT:** How? What was the method of  
16 communication?

17 **THE WITNESS:** They sent us a report.

18 **THE COURT:** When was the report sent to you?

19 **THE WITNESS:** This would have been not too far away  
20 from the -- when we started, Your Honor. It would have been  
21 around the summer. But I do not recall the exact date.

22 **THE COURT:** The summer of 2023?

23 **THE WITNESS:** That is correct.

24 **THE COURT:** How long is the report?

25 **THE WITNESS:** The report would have been a summary,



1 which means it's short.

2 **THE COURT:** How long is the summary?

3 **THE WITNESS:** The summary, roughly a couple of pages.

4 **THE COURT:** Great. Bring that too.

5 Go ahead.

6 **MR. PERRY:** Thank you, Your Honor.

7 **Q.** Moving to line 4, or excuse me, row 4 of your analysis,

8 Mr. Roman, can you explain to the Court what that means.

9 **A.** This line reflects what would be the projected revenue or  
10 the commission, assuming that all future sales, in other  
11 words, that Apple would only collect commission on the initial  
12 link, on the initial tap of the customer on the link, which is  
13 just a mathematical addition of the two rows above.

14 **Q.** Okay. And the next row, row 5?

15 **A.** In discussions with the team, we realized that customers  
16 could actually come back and tap on the link again. Therefore  
17 we needed to put an assumption regarding how many of these  
18 customers would go and do so.

19 **Q.** And did you have data for that?

20 **A.** We did not.

21 **Q.** Why not?

22 **A.** This is not something that we would have ever observed.

23 **Q.** Why would Apple not have observed customers tapping on  
24 links to make transactions outside the app before?

25 **A.** We do not have visibility into such data.

1 Q. And is there any analogous data at Apple that you could  
2 have relied on for this purpose?

3 A. No.

4 Q. So without data, how did you proceed?

5 A. We knew this number was going to be more than zero. And  
6 we knew that this number was going to be less than 100. And  
7 we decided to provide visibility into this assumption and just  
8 said that it was going to be 50 percent.

9 Q. Now, you discussed with Mr. Even earlier a little bit  
10 about the process of making assumptions in connection with  
11 your model; is that right?

12 A. That is correct.

13 Q. Is every assumption made the same way, or are there  
14 differences among the assumptions?

15 A. There are differences between the assumptions.

16 Q. So you just described the returning customer assumption is  
17 split the baby, if you will?

18 A. That is correct.

19 Q. Is that the same approach you applied to all the  
20 assumptions?

21 A. No.

22 Q. Okay. And we'll get to the other assumptions, but if we  
23 could finish out the chart; is that all right with you,  
24 Mr. Roman?

25 A. Yes, it is.

1 Q. Very good.

2 So after that -- or applying that assumption, what is the  
3 next line, row 5 on your chart, what does it represent?

4 A. This would be the addition of the two rows above. And it  
5 provides our expectation or projected revenue, commission,  
6 assuming that 50 percent of customers would tap again on the  
7 links.

8 Q. Okay. And again, we're going to come to the assumptions  
9 in a minute. But just to summarize where the numbers come  
10 from, if you will, row 1, the entitlement billings, that's  
11 from the indicative P&L; is that right?

12 A. Correct.

13 Q. And it's rolled forward two years, you explained; is that  
14 right?

15 A. That is correct.

16 Q. And can you just explain to the Court why you -- why is  
17 the indicative P&L fiscal year '23 and your projections are  
18 for two years in the future?

19 A. The indicative P&L is anchored on our actuals, what we  
20 have seen, the best numbers that we have to date. It's a good  
21 place to start our analysis.

22 For purposes of establishing the impact, we knew that  
23 developers would take time to implement, generating their  
24 systems, putting together reporting, understanding the value,  
25 design work.

1           Hence we had to roll forward our P&L a couple of years to  
2           make sure that we would capture what would be the steady state  
3           of whenever all of these changes were in place and we would be  
4           able to see what is the true impact on the App Store.

5           **Q.** To do that, you made these assumptions then at the bottom  
6           of the page. Is that -- am I following the logic, Mr. Roman?

7           **A.** That is correct.

8           **Q.** Okay. And let's talk about the assumptions, financial  
9           assumptions. Do you see that? Let's start on the left.

10          Seven-day attribution window, what does that mean?

11          **A.** That means that for seven days, all of the transactions  
12          from the customer on the developer's website would basically  
13          generate a commission.

14          **Q.** And that's the window that was ultimately adopted?

15          **A.** That is correct.

16          **Q.** And the next one is 50 percent returning customers. Is  
17          that the same as the assumption that has a line item, if you  
18          will, in the table?

19          **A.** That is correct.

20          **Q.** Okay. And then the next one, Mr. Roman, is entitlement  
21          billings. Do you see -- or excuse me -- entitlement share.  
22          And I know -- I know you covered this with Mr. Even, but can  
23          you just explain to the Court in a little more detail first  
24          what entitlement share is, and then second will be how you  
25          made this assumption.

1     **A.** Entitlement share is from all of the transactions that  
2     customers would do on the apps -- or with the developers that  
3     have implemented the linkout, what percentage of those  
4     transactions would actually go through that link.

5     **Q.** And how did you and your team -- or who -- first, who made  
6     that assumption?

7     **A.** This would be a collaboration between our finance team and  
8     our business management team.

9     **Q.** And were you personally involved in making this  
10    assumption?

11    **A.** I was not.

12    **Q.** So do you know who was?

13    **A.** I reviewed the assumption with this team. This would be  
14    my finance team. And this would be Mr. Oliver.

15    **Q.** Did you participate in the meetings concerning this  
16    assumption?

17    **A.** I did.

18    **Q.** And how many were there, do you know?

19    **A.** There were many. Many meetings.

20    **Q.** What does "many" mean in this context?

21    **A.** Over a dozen.

22    **Q.** Just on this assumption or on assumptions generally?

23    **A.** Just on this one.

24    **Q.** And can you describe for the Court how these meetings  
25    generally progressed to reach this assumption? What happened?

1 Why did you need a dozen meetings to reach this assumption?

2 A. To arrive at consensus, to make sure that we have the most  
3 accurate representation of what we expect would happen.

4 Q. And do you have data underlying this assumption?

5 A. For this one in particular, it was very hard for us to  
6 obtain hard data.

7 Q. And why is that?

8 A. When faced with a choice for developers between different  
9 options, it is unclear to us exactly how to calculate how  
10 customers would make these decisions.

11 Q. And do you have an understanding as to how the group, the  
12 consensus, landed at 30 percent? Is there a rationale, if you  
13 will?

14 A. Based on the recommended implementation of how the linkout  
15 would be shown, where it would be shown, and how customers may  
16 perceive the value of going through that link, we arrived at a  
17 number that we knew was going to be less than 50 percent.

18 From there, we had further conversations around the  
19 potential range of options. We modeled several of them. And  
20 then through conversation, we landed on three out of ten --

21 Q. Thank you.

22 A. -- as a more-likely-than-not outcome.

23 Q. Thank you, Mr. Roman.

24 And the next assumption listed is the billings entitlement  
25 implementation, correct?

1       **A.** That is correct.

2       **Q.** And I'm not going to read that number out loud, but I  
3 think Mr. Even accurately described it as a substantial  
4 majority; is that right?

5       **A.** That is correct.

6       **Q.** And can you explain how you arrived at this assumption?

7       **A.** Starting with the premise that this linkout entitlement  
8 would provide value to all developers, the question here was  
9 for whom it might not provide value.

10           And in here, we found a few different segments.

11           There are some developers that potentially are too small,  
12 for whom it might not make sense to dress up all of the  
13 infrastructure to potentially do it.

14           There is also programs, as we described, where developers  
15 might derive a lot more value.

16           And also, as we know, despite having strong economic  
17 motivations, some developers just don't do it.

18       **Q.** Now, Mr. Even asked you earlier whether the adoption rate  
19 a few months in cast doubt on this assumption, in your view.  
20 And do you have a perspective on that?

21       **A.** I do.

22       **Q.** And what is that, Mr. Roman?

23       **A.** This is too early to make that assessment.

24       **Q.** And why is that?

25       **A.** The changes that this would entail in the customer

1 experience in the back-end system for developers would take  
2 time to assess and operationalize before they would go live  
3 with a solution.

4 **THE COURT:** Do you know of any developer who is  
5 undertaking that? Any? Do you -- can you name a single one?

6 **THE WITNESS:** There is a developer -- none of them  
7 have gone live, Your Honor. I know that a lot of customers  
8 have -- a lot of developers have applied for this linkout  
9 entitlement.

10 **THE COURT:** Any of the 38 -- or no. Any of the  
11 200 that are on your list?

12 **THE WITNESS:** Not yet, Your Honor.

13 **THE COURT:** When do you anticipate seeing movement?

14 **THE WITNESS:** Over --

15 **THE COURT:** You say it's too early. So when do you  
16 anticipate seeing movement?

17 **THE WITNESS:** I would expect that over the next few  
18 months, Your Honor, we would see a lot more traction -- or  
19 more traction and interest in this.

20 **THE COURT:** I don't know what the difference is.  
21 Explain that.

22 **THE WITNESS:** In other words, my expectation would be  
23 that the shape of adoption might follow not a straight line  
24 but a low line in the beginning and stronger adoption after a  
25 year, year and a half.



1           **THE COURT:** Go ahead.

2           **BY MR. PERRY:**

3           **Q.** Do you have, Mr. Roman, any experience with new products  
4 or features or services at Apple to support that assumption?

5           **A.** Based on our own internal work and our release of  
6 features, we have noticed that for this particular segment,  
7 developers take time to make these assessments and to make  
8 sure that everything is operational and well established to  
9 provide the best customer experience.

10          **Q.** Now --

11           **THE COURT:** That's a pretty generic statement. Or I  
12 would say a pretty generic conclusion. What kind of data do  
13 you have to support that?

14           **THE WITNESS:** For instance, Your Honor, when we  
15 rolled out the small business program, adoption was not  
16 immediate. Even though the financial benefit would be large,  
17 it took time for developers to go through the process, apply,  
18 and make the right implementation even though that reduction  
19 in headline rate was significant.

20           **THE COURT:** Anything else?

21           **THE WITNESS:** When we have launched other features on  
22 the App Store, adoption from developers is not immediate. It  
23 takes time.

24           **THE COURT:** Like what?

25           **THE WITNESS:** In-app events, for instance.

1           **THE COURT:** I don't -- give me a specific.

2           **THE WITNESS:** I might not be able to do a good job  
3 doing that, Your Honor.

4           **THE COURT:** Well, then who would be the best person  
5 to give me the data?

6           **THE WITNESS:** Mr. Oliver.

7           **THE COURT:** All right.

8           Go ahead.

9           **MR. PERRY:** Thank you, Your Honor.

10          **Q.** Mr. Roman, is it possible that this litigation has any  
11 effect on developers' adoption of the new program; do you  
12 know?

13          **A.** It is possible.

14          **Q.** Why would that be?

15          **A.** Developers might be interested and see any other rulings,  
16 outcomes, or recommendations that might come out of it before  
17 engaging in that type of work.

18          **Q.** Now, Mr. Even asked you a question that suggested the  
19 assumptions in your analysis were, quote, made up, end quote.

20          Do you agree with that, Mr. Roman?

21          **A.** I disagree.

22          **Q.** And why is that?

23          **A.** We take a lot of care in providing our executives and  
24 providing price committee with the best information that we  
25 can to represent our expectation of how Apple will be impacted

1 by these changes.

2 Q. Why, in putting together your financial model for the  
3 price committee, Mr. Roman, did you disclose these assumptions  
4 on the -- in your -- in your chart? What's the purpose of the  
5 framework, if you will?

6 A. Changes to these assumptions would drive meaningful  
7 differences in the financial impact that the linkout  
8 entitlement might provide.

9 Q. And did you and your team run the model using different  
10 assumptions?

11 A. Yes, we did.

12 Q. And how did you choose the set of assumptions that  
13 ultimately was presented in this deck?

14 A. After running all of those scenarios and simulations, we  
15 concluded that these assumptions represented more of the  
16 expected values, not too high, not too low.

17 Q. Now, on that financial assumptions section of the  
18 effective commission, Slide .13, Mr. Roman, do you see below  
19 the assumptions it says, quote, the effective commission rate  
20 does not account for measurement risk. Do you see that?

21 A. Yes, I do.

22 Q. Can you explain what that means?

23 A. This is all of the numbers on this page do not take into  
24 account if developers have problems measuring the activity  
25 after the window, for instance on the reporting, or if

1 developers have problems paying the resulting commission.

2 Q. And is that the same as the measurement in collection risk  
3 that you mentioned with respect to a previous slide?

4 A. That is correct.

5 Q. Okay. Mr. Roman, you mentioned that one of the goals was  
6 to establish, quote, the value for all developers. Did you --  
7 did I get that right?

8 A. That is correct.

9 Q. And can you explain a little more about that.

10 A. The value for all developers is all of the future flow or  
11 all of the future customer purchases that could be derived out  
12 of the linkout entitlement.

13 And one of the assumptions that we have made is that the  
14 entitlement billings remain the same. It is possible that  
15 those entitlement billings could be different, even higher for  
16 developers to do. We did not make that assumption to be  
17 conservative in our analysis from an Apple perspective.

18 Q. Now, there's been considerable discussion today about  
19 payment processing fees. Do you recall that?

20 A. Yes, I do.

21 Q. Do you have a sense, by the way, Mr. Roman, what payment  
22 processing fees are in the external market? Do you know?

23 A. I have a broad sense.

24 Q. Can you explain that broad sense.

25 A. There is fees that are collected by Visa and Mastercard,

1 for instance. Those are very direct, published on their  
2 website. They depend on the amount of volume that goes  
3 through them.

4 These fees have a percentage and they also have a specific  
5 dollar amount, a few cents.

6 Deriving that percentage for individual developers would  
7 require understanding a lot of things on how their  
8 transactions flow and how much volume they would have to get  
9 those arrangements.

10 In addition to direct relationships with these networks  
11 and these financial institutions, there is providers that try  
12 to aggregate some of these services together, someone like  
13 Stripe. And their fees are also -- there are standard fees  
14 for smaller developers, but bigger ones are a range and are  
15 negotiated.

16 The definition of payment fee sometimes varies. Some  
17 people include customer support for those. Some people  
18 exclude them.

19 That's why sometimes there is not a standard definition,  
20 and it's important to understand the details behind to see  
21 what is the actual cost incurred.

22 **Q.** And in constructing the model for the linkout entitlement  
23 pricing, did you and your team make any effort to model  
24 payment processing fees?

25 **A.** Given that payment processing is something that is not

1 offered by Apple in connection with the linkout entitlement,  
2 we did not consider that this was value provided by Apple to  
3 developers. Hence, we did not spend a lot of time  
4 understanding what that payment processing number might be.

5 **THE COURT:** So the answer is no.

6 **THE WITNESS:** That is correct.

7 **BY MR. PERRY:**

8 **Q.** Now, Mr. Even suggested this morning that -- or this  
9 afternoon, Mr. Roman, that if a developer were to pay  
10 3.5 percent payment processing fee, the Apple link entitlement  
11 model would be uneconomic. Do you remember that question?

12 **A.** I do.

13 **Q.** And do you have a response to that?

14 **A.** I don't believe that's accurate.

15 **Q.** And why is that?

16 **A.** Developers would have economic benefit out of adopting the  
17 linkout entitlement. Such economic benefit, especially for  
18 developers in transactions, is large. Developers in the  
19 transactional business is large. Therefore, even if the range  
20 of payment processing is large, they would be able to continue  
21 deriving that benefit.

22 **Q.** Now, Mr. Roman, if the data you relied on in the  
23 assumptions that you and your teams made are correct, what  
24 does this slide show regarding effective commission rates?  
25 And don't say the number. Just what -- what does it -- what

1 is the bottom line, if you will, of this slide?

2 **A.** There is a lower than the headline rate in a meaningful  
3 way.

4 **Q.** And is the percentage number in row 6, does that bear some  
5 relationship to the matrix that appears on .12?

6 **A.** Yes, it does.

7 **Q.** And can you explain to the Court the relationship between  
8 those two slides, please.

9 **A.** That is the intersection on CX-0009.12 of 27 percent and  
10 seven days.

11 **Q.** And did you and your team perform a similar calculation  
12 for all the other cells on the matrix?

13 **A.** That is correct.

14 **Q.** And is that where these numbers are derived from?

15 **A.** That is correct.

16 **Q.** Okay.

17 Now, if we look at slide -- back at another your more  
18 detailed table, Mr. Roman, .13.

19 (Exhibit published.)

20 **BY MR. PERRY:**

21 **Q.** Slide 1 is the entitlement billings. Can you just explain  
22 very briefly again, what is that number?

23 **A.** That would be all of the billings that would be generated  
24 by the developers that would adopt the entitlement.

25 **Q.** And if you turn back to your indicative P&L at .10.

(Exhibit published.)

**BY MR. PERRY:**

**Q.** The App Store billings line -- sorry, I'm going to ask you to do some quick math without saying the numbers out loud.

Can you do the percentage between those two numbers, Mr. Roman?

**A.** It's larger than a fifth.

**Q.** Than a fifth?

**A.** Yeah.

**Q.** So 20-plus -- your model is showing that 20-plus percent of billings two years from now would flow through the link entitlement; is that right?

**A.** That is correct.

**Q.** Mr. Roman, you were asked a couple of questions about program eligibility. Do you recall that?

**A.** Yes, I do.

**Q.** Can a developer who is a member of one of the special programs, for example, the video partners program, take advantage of the new link entitlement if they choose?

**A.** Yes, they do.

**Q.** How would they do that?

**A.** They would have to opt out from their current program and adopt this one.

**Q.** So it's a one or the other situation?

**A.** That is correct.



1 Q. And why is that? Could you just -- what's the logic  
2 behind it?

3 A. Mr. Oliver would be able to provide more details.

4 I can tell you that in our discussions, these developers  
5 derive benefit from deeper integration with Apple in, for  
6 instance, in the video partner program with a TV app, the  
7 needed inclusion in TVOS.

8 And there are certain customer features, like single sign  
9 on, that would make a very awkward customer experience trying  
10 to have a linkout entitlement while actually trying to stay  
11 within that program.

12 Q. Okay. Thank you.

13 If you could turn in your deck, Mr. Roman, to Slide .14,  
14 which is entitled "Steady State Net Impacts on App Store  
15 Financials." Do you have that?

16 A. Yes, I do.

17 Q. Now, let's start at the bottom in the assumptions.  
18 Returning customers, is that the same as we've already  
19 discussed?

20 A. Yes, it is.

21 Q. And entitlement share, is that the same as we've already  
22 discussed?

23 A. Yes, it is.

24 Q. And billings entitlement implementation, is that the same  
25 as we've already discussed?

1       **A.** Yes, it is.

2       **Q.** And here, what about measurement impact?

3       **A.** This is the assumption we were discussing around the  
4       developers' inability to pay for having problems with  
5       measuring the portion of the commission that they would need  
6       to send to Apple.

7       **Q.** So in the previous slides, I think we saw that the  
8       measurement risk was not included; is that right?

9       **A.** That is correct.

10      **Q.** Why did you include measurement risk in this final slide?

11      **A.** It is more relevant to understand such measurement risk  
12      when we are calculating the dollar delta or the dollar impact  
13      for Apple.

14             In calculating the effective commission rate, it might be  
15      less relevant given that that might not be the same view that  
16      a developer might look.

17      **Q.** And without saying the number, how did you and your team  
18      come up with the measurement risk percentage that is shown on  
19      the footnote to Slide .10 -- or excuse me -- Slide .14?

20      **A.** We have a -- a couple of data points. One of them is from  
21      a credit perspective, credit defaults, that is a number that  
22      we have visibility into. And then from an underreporting  
23      perspective, we made a conservative assumption of what that  
24      might be.

25      **Q.** And that's based on -- when you say credit defaults, for

1 example, our -- where does that data come from?

2 A. There is publicly available information on bankruptcies,  
3 defaults, and then problems with payments.

4 Q. Now, Mr. Even asked you why the assumptions don't change  
5 as the rates and windows change.

6 Do you recall that question?

7 A. Yes, I do.

8 Q. And do you have an answer?

9 A. Yes. In looking at this analysis and considering the  
10 price elasticity impact that it might have from a developer  
11 perspective, in these ranges, even though that the percentage  
12 may look wide, in trying to run elasticity models it was  
13 difficult for us to see that there would be significantly  
14 different adoption rates or adoption percentages.

15 Likewise, whenever it comes time for understanding  
16 customer adoption and the strategies that developers might  
17 pursue to communicate to customers that price, those would  
18 vary quite a bit over the range and over time.

19 Therefore to simplify the analysis, given that even  
20 understanding some of that elasticity didn't provide a major  
21 impact on this page, we decided to leave it unchanged.  
22 Changes to other assumptions on this page would have a wide,  
23 larger impact.

24 Q. You referred on the developer side, I think, Mr. Roman, to  
25 elasticity; is that right?

1       **A.** That is correct.

2       **Q.** Could you explain to the Court what you meant by  
3 elasticity?

4       **A.** Price elasticity could be understood as the percentage of  
5 change in demand given a percentage change in price.

6       **Q.** And how did you measure or model elasticity in connection  
7 with this pricing determination you were assisting with?

8       **A.** We do not have a good sense of elasticity in this context  
9 given that we do not do these price changes often.

10           However, we do have a few other data points. We have  
11 noticed that -- and this is in some markets -- whenever we  
12 have foreign exchange or changes in taxes and other things  
13 that change the prices a little bit, there's not a wide change  
14 in ultimate customer-facing prices. That's one of the data  
15 points that we know and we have.

16           And from a developer perspective, it is about  
17 understanding what will happen in a year, what will happen in  
18 two years. Many developers use measures such as customer  
19 lifetime value to understand the impact that this might have.

20           Hence we decided to stay in a tight range and simplify the  
21 analysis.

22       **Q.** Did you actually conduct a model or create a model of  
23 elasticity?

24       **A.** Early on we tried, and it did not give us that much  
25 incremental information.

1 Q. And on the customer side, can you explain that a little  
2 more too?

3 A. When developers find good price points for the digital  
4 goods or subscriptions, they tend to be very optimized  
5 already. For them to drive a meaningful change, it could be  
6 observed more as promotion sometimes, they could be observed  
7 as temporary changes.

8 Every developer has a very unique circumstance. Therefore  
9 observing the impact on customers on a broad basis is very  
10 difficult to model.

11 Q. Did you make an assumption regarding whether and how  
12 developers would incorporate any commission into their  
13 pricing?

14 A. We did not.

15 Q. And why is that?

16 A. The overriding assumption was if there was a financial  
17 benefit for developers, even in current state, that they would  
18 start work and development to take advantage of the linkout  
19 entitlement.

20 Q. And in zooming back, if we could, to the -- to the chart  
21 on the page .14A, could you explain to the Court what it is  
22 you are showing to the company on this slide.

23 A. For instance, on the left side, for revenue, each  
24 intersection of headline rate and duration window expresses  
25 the decrease in revenue compared to our baseline projection

1 given the adoption of linkout entitlement.

2 Q. And the Court asked earlier, Mr. Roman, whether Apple's  
3 goal was to maintain its revenue. Do you remember that?

4 A. Yes, I do.

5 Q. What does this chart and, for example, looking at the cell  
6 for the intersection actually chosen tell us -- tell you about  
7 the -- Apple's understanding of the likely revenue effect of  
8 this new link entitlement?

9 A. Our expectation is that --

10 Q. I'm sorry. Without saying the number out loud, please.

11 A. Our expectation is that we will not sustain current levels  
12 of revenue. They will be lower.

13 THE COURT: Right, but the higher the percentage, the  
14 more you make, obviously.

15 THE WITNESS: That is correct.

16 THE COURT: So it's -- it is -- if Apple is intending  
17 or hoping to maintain as high a revenues as it can, then the  
18 higher the commission rate, the better for Apple.

19 THE WITNESS: That is correct, Your Honor.

20 THE COURT: Go ahead.

21 MR. PERRY: Thank you, Your Honor.

22 Q. Mr. Roman, the slide .14A calculates the expected  
23 revenue impact. And is this, by the way, a one-time number or  
24 an annual number?

25 A. This is an annual number.

1 Q. And this is over -- compared to what, Mr. Roman?

2 A. This is compared to the expected number without a linkout  
3 entitlement roughly two years out.

4 Q. Okay. And do you know, Mr. Roman, what the -- strike  
5 that.

6 Why did you measure this on both a revenue basis and a  
7 gross margin basis, Mr. Roman?

8 A. These are the two lines that would show the most  
9 meaningful change compared to the indicative P&L. Billings,  
10 our assumption is that they would remain roughly the same.  
11 Now a portion of billings would be transacted directly in the  
12 developers' website, but the overall customer activity is  
13 assumed to remain constant.

14 Revenue, important to understand the impact on commission.  
15 And for gross margin, given that we would not be processing  
16 payments for these transactions, this would be the only change  
17 that would ensue.

18 And hence these are the two metrics that we provide with  
19 all of the deltas to understand the impact on the indicative  
20 P&L.

21 Q. Mr. Roman, if the assumptions in your model hold and we're  
22 two years down the road, what does the revenue impact slide  
23 tell you about the impact of the new link entitlement on  
24 Apple -- on the App Store's revenues?

25 A. It is a large impact.

1 Q. Thank you, Mr. Roman.

2 MR. PERRY: No further questions, Your Honor.

3 THE COURT: Any reexamination?

4 MR. EVEN: Yes, Your Honor. I'll try and be brief.

5 REDIRECT EXAMINATION

6 BY MR. EVEN:

7 Q. I apologize in advance, Mr. Roman. I tried to be somewhat  
8 linear in my direct. I'm not going to be successfully linear  
9 on my recross. I'm going to jump around a little bit so try  
10 and bear with me.

11 I want to start with something that I'm not sure I heard  
12 correctly. But I think what you told Mr. Perry is that you  
13 chose to run your own analysis of P&L rather than go to the  
14 FP&A P&L because you have better view of the data. Correct?

15 A. That is correct.

16 Q. Okay. That is not what you said in your declaration, is  
17 it? In your declaration, you said that Apple cannot produce a  
18 fully burdened P&L. And that's why you have what you have  
19 here, correct?

20 A. That is correct.

21 Q. In fact, two days ago I asked you if you were aware of  
22 this Court's finding that not only can Apple conduct a fully  
23 burdened P&L, that Apple did and does conduct such P&L's at  
24 the FP&A, and you told me you were not aware of that. Do you  
25 remember that?



1 A. I do.

2 Q. And so in the two days that have passed, you've now  
3 developed an awareness of the FP&A P&L's and retroactively  
4 decided that actually you chose not to use them because you  
5 have better line of sight into the data?

6 A. Those P&L's, even when they try to make a fully burdened,  
7 they are not --

8 Q. Sir, they did not try to make a fully burdened. This  
9 Court has already found that they did and do make a fully  
10 burdened P&L. And you were not even aware of those P&L's.  
11 That's what you told me.

12 A. That is correct.

13 Q. Sir, did you speak to your lawyers or anybody since  
14 Wednesday?

15 A. I did not.

16 Q. Talked a little bit about the bundled or weighted fee  
17 rate, correct, with Mr. Perry?

18 A. Yes.

19 Q. Yes. And you explained, I believe, that the blended rate  
20 is a weighted average between 30 percent and 15 percent,  
21 correct?

22 A. Can you clarify --

23 Q. Yes.

24 A. -- what are --

25 Q. When you talk about Apple's blended rate, that is a

1 weighted average between 30 percent and 15 percent, correct?

2 A. That is correct.

3 Q. All right.

4 Now, that blended rate, by definition, is going to be  
5 below 30 percent, correct?

6 A. That is correct.

7 Q. But for a developer that is subject to a 30 percent fee,  
8 they would still pay 30 percent, correct?

9 A. That is correct.

10 Q. And so the blended rate only reflects what Apple collects  
11 on average. It does not reflect what developers actually pay.  
12 Correct?

13 A. That is correct.

14 Q. Now, on the slides where you calculate or show 18 percent,  
15 18 percent is a blended rate, correct?

16 A. That is correct.

17 Q. And that means that a developer that is subject to  
18 27 percent is not actually going to pay 18 percent. They're  
19 going to pay some number between 18 percent and 27 percent  
20 even if we accepted all your calculations and estimations in  
21 that slide, correct?

22 A. Oddly enough, for some developers that are paying the  
23 headline rate --

24 Q. Sir?

25 A. -- they might --

1 Q. It's a simple question. The 18 percent is a blended rate  
2 between 27 and 12. Correct?

3 A. That is correct.

4 Q. And so a developer that pays 27 percent is not actually  
5 going to pay 18 percent. They're going to pay something  
6 between 18 and 27, if we accept all your assumptions?

7 A. The answer is it depends.

8 THE COURT: Well, look, I don't need to have you all  
9 sparring. Although it's part of the game.

10 My understanding is that you are trying -- what I -- what  
11 I think you're trying to do is somehow suggest that if  
12 developers receive revenues or billings outside of the  
13 seven-day period for which they pay nothing, then you're using  
14 that calculation to decrease the rate of 27 percent. Because  
15 on every single sale that they make during that seven-day  
16 period, if Apple audits their books, they must pay 27 percent,  
17 period, right?

18 THE WITNESS: That is correct, Your Honor.

19 THE COURT: Okay.

20 BY MR. EVEN:

21 Q. And what I'm asking you is even if we then apply all your  
22 estimates and all your assessments, somebody who's subject to  
23 a 27 percent fee is not going to go all the way down to  
24 18 percent.

25 A. My answer is that not always. And it's complicated.

1 Q. For most developers subject to 27 percent, for most  
2 revenues, they're going to pay more. Otherwise we have a  
3 bunch of developers on the other side that clearly pay less  
4 and you need to land at 18, correct?

5 A. The 18 is a blended average.

6 Q. Correct. And therefore what I'm saying is some developers  
7 are going to pay more than 18 percent. Some developers are  
8 going to pay less than 18 percent, right?

9 A. That is correct.

10 Q. Okay. I'm glad we got that sorted out.

11 Now we talked earlier that there are two cost lines for a  
12 developer, correct?

13 A. Yes.

14 Q. One of them is the fee to Apple, the other is the fee to a  
15 payment solution other than Apple when they're taking their  
16 purchase outside of the app, correct?

17 A. That is correct.

18 Q. Now, we've already established that you did not do  
19 anything to calculate that second line item, correct?

20 A. That is correct.

21 Q. And now what you're telling me is that you've not shown  
22 what any particular developer is going to see for the first  
23 line of the Apple effective rate because it's somewhere  
24 between, some will pay more than 18, some less than 18, and  
25 you can't peg it?

1     **A.** The 18 percent, as you pointed out, as we've discussed, is  
2     a blended average. Individual developer calculations could be  
3     derived.

4     **Q.** I understand they could be, but they haven't been derived,  
5     correct?

6     **A.** For purposes of this analysis, we care about the aggregate  
7     impact to Apple.

8     **Q.** I understand that you care about the aggregate impact to  
9     Apple. But to understand if developers will see a higher cost  
10    and will be able to use -- to charge and offer lower prices,  
11    the question is not the aggregate impact on Apple. The  
12    question is the individual impact on developers.

13         Do you understand that?

14    **A.** I do.

15    **Q.** And that is not something that you -- that you presented  
16    to Mr. Cook in any way, shape, or form, right? You did not.

17    **A.** We did not provide individual calculations. That is  
18    correct.

19    **Q.** You did not provide a specific number even on average just  
20    for the folks who are subject to 27 percent as opposed to  
21    12 percent. That's nowhere in your deck, correct?

22    **A.** That is correct.

23    **Q.** You mentioned that the Netherlands was a much smaller  
24    analysis, right?

25    **A.** That is correct.

1 Q. And that's because it was limited, you said, to dating  
2 apps, right?

3 A. That is correct.

4 Q. Now, Korea actually has a lower fee to Apple, 26 percent,  
5 and is not limited at all to any type of apps, correct?

6 A. That is correct.

7 Q. So when you said that there was no precedent and there was  
8 nothing to look at for adoption rates, in fact, there is both  
9 Korea and the Netherlands, right?

10 A. They do not have the same concept of --

11 Q. You did not look at either, did you?

12 A. We did not consider them as relevant for this analysis.

13 Q. Okay. You're not representing to this Court that the  
14 large majority of developers selling apps in the Korean App  
15 Store have adopted alternative payment solutions, are you?

16 A. I am not.

17 Q. No one is; right? No one has come here and did that.  
18 That's not in Apple's papers. It's not in Apple's  
19 declarations. You haven't looked at it because you thought  
20 for some reason the only place in the world where you actually  
21 charge 26 percent on people not using your payment solution is  
22 irrelevant, nobody's offering that testimony here.

23 A. That is correct.

24 THE COURT: And how long has that one been employed?

25 THE WITNESS: Your Honor, I am not completely sure,

1 but it --

2 **THE COURT:** Give me a ballpark.

3 **THE WITNESS:** I would say a year.

4 **BY MR. EVEN:**

5 **Q.** Sir, the Netherlands has been in play since January of  
6 2022. Are you aware of that?

7 **A.** I was referencing Korea, your last statement.

8 **Q.** Okay. I believe Korea was June. I'm not sure if it was  
9 2022 or 2023, but I'm sure Apple can find that out and let us  
10 know.

11 Mr. Perry asked you about -- suggested that I told you  
12 that your estimates were made up and whether you agreed with  
13 it. I didn't tell you that. I asked you and you said yes.

14 So are you changing your testimony on that as well?

15 I asked you your assumptions were essentially made up.  
16 You said that's correct. Do you recall that?

17 **A.** Our assumptions are a combination of data points and  
18 information that we have to make the most accurate estimates.

19 **Q.** Okay. And data points, you mean these very long meetings  
20 with multiple people that got in a room and decided that a  
21 large proportion of developers are going to adopt this?

22 **A.** That is correct.

23 **Q.** You understand that a thousand people can meet a thousand  
24 times, if they have zero data they're not going to get any  
25 closer to a real assumption, are they?

1     **A.** Doesn't prevent from trying to find the data.

2     **Q.** I understand it doesn't prevent anyone from trying to do  
3     anything, but you understand that if we get a lot of people in  
4     a room multiple times but provide them no data, they're not  
5     going to get any closer to a correct answer. Right?

6     **A.** That is possible.

7     **Q.** Now, you told the Court that in fact a large number of  
8     developers applied. The large number is the 38 that we  
9     discussed earlier, correct?

10    **A.** Correct.

11    **Q.** That's what you call a large number?

12    **A.** It's a good number.

13    **Q.** It's a good number. Okay.

14         It's a good number for Apple. You agree with that, right?

15         You mentioned some studies about the seven-day window and  
16     you said you have a good line of sight into when people begin  
17     and end a purchase process, right?

18    **A.** That is correct.

19    **Q.** Is it actually your testimony that Apple has data that  
20     shows that people click on IAP to buy something but then don't  
21     go through with the transaction for more than seven days, and  
22     that happens for most clicks?

23    **A.** The data is -- the data point is slightly different than  
24     what you mentioned.

25    **Q.** How is it different?



1     **A.** The data point represents from the amount of purchases  
2     that a customer would do in a time period, let's say a year --

3     **Q.** Sir --

4     **A.** -- how --

5     **Q.** -- the fact that I go back to Amazon every seven days  
6     doesn't say anything about whether I'm going to go back to  
7     Amazon with a click, without a click, through a link, whether  
8     I'm going to do that on other apps at all. It just shows that  
9     if I like Amazon, I'm going to go back, right?

10    **A.** If you're purchasing every single day or if you're  
11    purchasing every seven days or every 30 days, it would make a  
12    difference.

13    **Q.** Sir, the relevant question is not whether people are going  
14    to make more purchases from the developer. The question is  
15    whether they're going to make more purchases from the  
16    developer without clicking on the link that got them there in  
17    the first place. That's what makes the difference, right?

18    **A.** Or at least preserve the same amount, correct.

19    **Q.** Okay. But so what is the data that suggests to you that  
20    in fact people are going to go -- not only going to go back,  
21    but are going to go back in a completely different way from  
22    the way they got there in the first place? Where is that  
23    data?

24    **A.** It is our estimation that developers would be  
25    incentivized --

1 Q. I'm not asking about estimation, sir. Where is that data?  
2 Do you have data, actual data, a good line of sight, as you  
3 said, into the fact that people click on something and then go  
4 and make a -- an identical purchase using a completely  
5 different mechanism than they did in the first instance?

6 A. The data that we have is how many times a customer would  
7 start the transaction, click in a given period of time as a  
8 proportion of a larger time frame such as, let's say, a year.

9 Q. Sir, I understand that the first time I click on Amazon,  
10 that's not going to show a large proportion of my purchases if  
11 I click then a thousand additional times and buy other items.  
12 That's not the question here.

13 The question here --

14 THE COURT: So, Mr. Even.

15 (Simultaneous colloquy.)

16 BY MR. EVEN:

17 Q. -- is whether I'm going to get to Amazon in a different  
18 way.

19 THE COURT: I'm going to allow you to cross him when  
20 I get the report. Can we just get the report and move on.

21 MR. EVEN: Yes, Your Honor. I -- at least as to move  
22 on, which I think is in my purview.

23 Q. You said that your assumptions about adoptions were about  
24 a two-year horizon, time horizon, right?

25 A. That is correct.

1 Q. Did you do any kind of modeling to see how quickly  
2 developers would adopt this if the fee was zero?

3 A. We did not.

4 MR. EVEN: No further question, Your Honor.

5 THE COURT: All right. Any re-exam? I have seven  
6 topics. And he will, at the end of the day step down, but he  
7 is not excused and he cannot talk to lawyers or anyone else  
8 about his testimony until I get those reports and decide  
9 whether he needs to be examined on them.

10 MR. PERRY: Your Honor, we will get you the reports.  
11 No further questions from me at this time.

12 THE COURT: All right. Do you understand my  
13 instruction?

14 THE WITNESS: Yes, I do, Your Honor.

15 THE COURT: I'll see you back here on Wednesday, next  
16 Wednesday, the 22nd, at 9:00 a.m. You'll have those reports  
17 and we'll see if we have any more questions.

18 Oh, sorry. Thursday.

19 THE CLERK: As I understand, Your Honor --

20 THE COURT: What time.

21 THE CLERK: -- the 16th at --

22 THE COURT: Okay. Yeah, so the next day that I've  
23 cleared for you all, so we do the 16th, the 17th, and then  
24 I've now cleared Wednesday, May 22nd from 9:00 to 1:30.

25 So I'll see you Thursday.

1           **THE WITNESS:** Thank you, Your Honor.

2           **THE COURT:** Thank you.

3           Okay. We have 30 minutes. Who do you want to take?

4           **MR. BORNSTEIN:** Your Honor, our next witness is  
5           Mr. Barnes.

6           **THE COURT:** And with respect to that last issue,  
7           Mr. Perry, if you'll send those documents on Monday, then you  
8           all can meet and confer and decide whether any examination is  
9           necessary.

10          **MR. PERRY:** Yes, Your Honor.

11          **THE COURT:** If you all agree there's no exam  
12          necessary, then the witness can be excused.

13          **MR. PERRY:** Thank you, Your Honor.

14          **MR. BYARS:** Your Honor, Brent Byars for Epic. Epic  
15          calls Ned Barnes.

16          **THE COURT:** Please remain standing.

17          **THE CLERK:** Please raise your right hand, sir.

18

19                           **NED BARNES,**

20          called as a witness for the plaintiff, having been duly sworn,  
21          testified as follows:

22          **THE WITNESS:** I do.

23          **THE CLERK:** Thank you. Please be seated. And speak  
24          clearly into the microphone.

25          **MR. BYARS:** Your Honor, may we hand some binders?

1           **THE CLERK:** Please state --

2           **MR. BYARS:** Apologies.

3           **THE CLERK:** Please state your full name and spell out  
4 your last name for the record.

5           **THE WITNESS:** Ned Barnes, B-A-R-N-E-S.

6           **THE COURT:** You may approach.

7           **MR. BYARS:** Thank you, Your Honor.

8           **THE COURT:** All right. Counsel, if you'll remind me  
9 of your name.

10          **MR. BYARS:** It's Brent Byars, Your Honor.

11          **THE COURT:** You may proceed when you're ready.

12          **MR. BYARS:** Thank you, Your Honor.

13                           **DIRECT EXAMINATION**

14          **BY MR. BYARS:**

15          **Q.** Mr. Barnes, did you testify at the trial in this matter?

16          **A.** I did.

17          **Q.** Can you please remind us the areas of your expertise.

18          **A.** Yes. I'm a CPA and a Certified Fraud Examiner, and I have  
19 been practicing as a forensic accountant for close to  
20 30 years.

21          **Q.** And did you have an opportunity to review the declaration  
22 and presentation submitted by Mr. Roman?

23          **A.** I did.

24          **Q.** And do you have a general understanding of why Mr. Roman  
25 presented the data relating to profits in those materials?

1       **A.** Yes, I do.

2       **Q.** What is that general understanding?

3       **A.** Very generally, my understanding is that his analysis of  
4 profits flows into the broader pricing analysis that was the  
5 subject of much of his testimony today.

6       **Q.** Did you form an opinion about the reliability of  
7 Mr. Roman's statements about App Store profitability?

8       **A.** Yes, I did.

9       **Q.** And what are the opinions that you formed about those  
10 statements?

11       **A.** I have two principal ones.

12           First, Mr. Roman has suggested that Apple cannot and does  
13 not maintain a fully burdened P&L for the App Store in the  
14 regular course of business. My research contradicts that. My  
15 testimony contradicts that. And this Court agreed with my  
16 testimony.

17       **Q.** What was the other opinion you referenced?

18       **A.** The second opinion is that Mr. Roman presents gross margin  
19 percentages and operating margin percentages that he suggests  
20 are meaningful in some way that are substantially materially  
21 lower than what Apple, in its own ordinary course of business,  
22 calculates as its -- both its gross margin percentage and its  
23 operating margin percentage, and which I calculated in  
24 connection with my testimony in this trial and, again, with  
25 which the Court agreed.

1 Q. And were you able to determine why Mr. Roman's metrics  
2 were so much different from those that you had determined?

3 A. I was.

4 Q. And could you give the Court a general background or  
5 summary of that?

6 A. Yes. There are -- there are two, again, two principal  
7 reasons.

8 One is Mr. Roman has suggested, I believe, he had two  
9 methodologies for allocating operating expenses to the App  
10 Store. Neither one of those methodologies is in any way close  
11 to what Apple has done in the ordinary course of business  
12 based on my investigation and research and testimony.

13 I don't want to go into numbers, I don't think I can go  
14 into numbers, but they're -- he's suggesting a materially  
15 larger amount of operating expenses are being allocated to the  
16 App Store than what Apple actually does, which is therefore  
17 decreasing his reported margins.

18 The second is he -- he doesn't calculate gross margins or  
19 operating margins correctly.

20 Q. And before we ask you to explain that a little further,  
21 could you give the Court some background starting with what is  
22 an operating profit margin?

23 A. So let's first talk about operating profit. So operating  
24 profits nominally or on dollar terms are the revenues that a  
25 company or business unit generates, less all of the cost of

1 goods sold and operating expenses that are related to the  
2 ongoing operations of that company or business unit. And the  
3 sum of all that data results in an operating margin.

4 **Q.** Could you explain how to calculate an operating margin.

5 **A.** Yeah. So an operating margin percentage, then, is when  
6 you divide the nominal operating profits that we just  
7 talked -- that I just discussed by the amount of revenue that  
8 a company or business unit generates.

9 So it's the proportion of the revenue generated by the  
10 company or business unit that actually flows all the way down  
11 and goes into operating profits.

12 **Q.** And if either of those numbers, operating profits or  
13 revenue, is incorrect, can you get to a correct operating  
14 margin percentage?

15 **A.** No. It's not going to be meaningful.

16 **Q.** And did you have an opportunity to identify how Apple  
17 calculates revenue for the App Store, first of all?

18 **A.** Yes, I did.

19 **Q.** How -- how does Apple do so in the ordinary course of  
20 business?

21 **A.** In the ordinary course of business, and this is consistent  
22 with accepted -- generally accepted accounting principles, is  
23 Apple recognizes revenue only to the extent of the commissions  
24 that they retain from App Store transactions. That's just  
25 limited to App Store revenue, not the company-wide revenue,



1 but for the App Store revenue.

2 Q. Thank you.

3 And to use an example, let's say a user makes a  
4 transaction of \$10 for a digital good through the App Store  
5 and Apple collects, say, \$3.00, 30 percent. What portion of  
6 that would -- would Apple recognize as revenue?

7 A. It would recognize \$3.

8 Q. And then from there, how does Apple, in the ordinary  
9 course of benefit -- of business, calculate App Store profits?

10 A. So then what -- what Apple would do -- or what Apple does  
11 is they, on a regular basis, they maintain and identify those  
12 revenues that we just discussed, as well as all of the cost  
13 of -- cost of goods sold that relate to the App Store activity  
14 that they incur and operating expenses that include both  
15 direct operating expenses and indirect operating expenses that  
16 may be allocated or shared across other businesses.

17 Q. At trial you testified about the App Store profit margins.  
18 Could you please remind what you testified those App Store  
19 profit margins were?

20 A. Yes. For the last two years that I had access to data,  
21 they were somewhere in the 77 to 79 percent range.

22 Q. Okay. Now let's look at Mr. Roman's calculations in his  
23 presentation.

24 MR. BYARS: This is included, Your Honor, in  
25 Mr. Barnes' demonstrative which is the first tab in Your

1 Honor's binder.

2 And Apple has asked us not to display this publicly so  
3 we'll just look at it in the binder.

4 **Q.** As Slide 1, can you please explain what slide 1 is?

5 Actually Slide 2, CDX-184-2.

6 **A.** (Reviewing document.)

7 Right. This is the slide from Mr. Roman's -- that was  
8 attached to Mr. Roman's declaration that he calls an App Store  
9 ecosystem indicative P&L.

10 **Q.** And could you explain how Mr. Roman calculated operating  
11 margin percentage on this slide?

12 **A.** Yes. He flows through to get to, as he walked through the  
13 different lines, to get to operating margin in dollars, which  
14 again, there's issues with how he identifies operating  
15 expenses here.

16 But when he gets to operating margin, he then divides that  
17 by App Store billings, not revenue. And App Store billings  
18 does not represent revenue for Apple.

19 **Q.** And is it correct to calculate operating margin percentage  
20 by dividing by App Store billings rather than revenue?

21 **A.** It is not. It's a mischaracterization.

22 **Q.** And have you ever seen Apple, in the course of your  
23 investigation, calculate operating margin percentage in that  
24 way?

25 **A.** No, I haven't. And I saw many examples where Apple

1 prepared App Store P&L's and calculated App Store operating  
2 margin. They never did it that way.

3 **Q.** And does Apple report to the public the way in which it  
4 calculates revenue for the purposes of its -- of its P&L's?

5 **A.** Yes, they do.

6 **MR. BYARS:** And, Your Honor, I'd like to refer you to  
7 the next slide, CDX-184.3.

8 (Exhibit published.)

9 **BY MR. BYARS:**

10 **Q.** Mr. Barnes, could you please explain what's on this slide?

11 **A.** Yes. This is an excerpt from Apple's, I believe, most  
12 recent 10-K SEC filing. And this basically sets forth what's  
13 called a revenue recognition policy.

14 And the highlighted portion here describes Apple's revenue  
15 recognition policy with respect to the digital goods sold on  
16 the App Store. And this sets forth what we just discussed,  
17 that Apple recognizes revenue, only its commission that it  
18 retains, not the amounts that go to the developers.

19 **Q.** And does Apple have a choice about whether to include all  
20 of the developer payouts or just its commission when it's  
21 calculating revenue?

22 **A.** They don't have a choice. There -- there's guidance  
23 that's issued by -- by the accounting regulations that set  
24 forth criteria that companies are supposed to evaluate to make  
25 that determination.

1 And here, I believe Apple correctly has applied those  
2 criteria. It's -- it's not really a close call that in this  
3 case, they would only recognize revenue on their commissions.

4 **Q.** And were you able to identify the key criteria that Apple  
5 applies that requires it to recognize only the commissions as  
6 revenue?

7 **A.** Yes, I believe there are probably several of the criteria  
8 that weigh in the favor, but the most significant is that  
9 Apple doesn't take control of the digital goods that pass  
10 through on the App Store.

11 **Q.** And if we could go to the next slide, could you explain,  
12 with the help of this slide, the impact of Mr. Roman's change  
13 from the ordinary practice on the margin percentages he  
14 calculates?

15 (Exhibit published.)

16 **THE WITNESS:** Yes. So this is a hypothetical example  
17 I put together just to -- just to point out how significant it  
18 is with the -- what I believe is a mischaracterization by  
19 Mr. Roman.

20 So if we start at the top line, which is App Store  
21 billings, and we assume that Apple's commission percentage was  
22 30 percent, that would result in revenue for the App Store at  
23 \$300.

24 And then I have oversimplified here, but I've estimated  
25 direct and indirect costs at 60. That's roughly 20 percent of

1 the Apple's App Store revenue, which is consistent with my  
2 historical analysis of the App Store's profit and loss  
3 statements. And that would produce operating margin dollars  
4 of 240.

5 So then, if you calculate operating margin percentage  
6 correctly, you would take the 240 and divide it by the 300.  
7 And that would produce an operating margin percentage of  
8 80 percent.

9 If you calculate it incorrectly and you take the \$240 and  
10 divide it by 1,000, which is what Mr. Roman does, you would  
11 get an operating margin percentage of 24 percent.

12 **BY MR. BYARS:**

13 **Q.** And did you have opportunity to read Mr. Roman's testimony  
14 from Wednesday as well as see him testify here today?

15 **A.** I did.

16 **Q.** And was there anything in his testimony that either  
17 contradicted or confirmed your assessment?

18 **A.** Well, I believe he did indicate at one point that if you  
19 divided the App Store operating margin or operating profits by  
20 revenue, you would get -- he thought they could be above  
21 75 percent.

22 And I certainly agree with that. In fact, that's the only  
23 way to calculate operating margin percentage.

24 **Q.** And could you please briefly summarize the other issue you  
25 referred to with Mr. Roman's calculations regarding

1 allocations?

2 **A.** Yeah. So Mr. Roman just not too long ago walked through  
3 the two, what he called the two methods for allocating  
4 operating expenses, various operating expenses such as R&D and  
5 G&A to the App Store. And neither one of those methods are  
6 reasonable or close to the way that Apple has done it in the  
7 ordinary course of business, based on my investigation which,  
8 again, I testified to at this trial and the Court accepted.

9 **Q.** And I have the next slide which I'm going to ask Mr. Lyon  
10 not to display, an example from the evidence at trial. This  
11 is CDX-184.5.

12 I understand some people call this a Sankey diagram.  
13 Could you please explain what this diagram depicts?

14 **A.** Yeah, so this diagram on the left-hand side shows  
15 basically a lot of the operating expenses by group function  
16 that Apple maintains.

17 And what it's purporting to show graphically -- I don't  
18 have the underlying data for how this graph was put together.  
19 But it shows graphically how those various operating expense  
20 categories flow to the various products and services that are  
21 on the right-hand side of the graph.

22 And so you can just see at an order -- on an order of  
23 magnitude where the operating expenses are being allocated to  
24 the different products and services.

25 And just one thing real quick, Mr. Byars.

1 Q. Please.

2 A. This is -- I was able, as I believe I testified at trial,  
3 to reconcile this particular document with Apple's SEC  
4 filings. So if anyone is suggesting that this is not relevant  
5 or reliable data, this information was communicated to their  
6 shareholders and the investing public.

7 Q. And just for clarity, without using any of the details,  
8 their product groups on the right side, where does the App  
9 Store live among the products? And perhaps you could just  
10 identify it by identifying where it is on the chart.

11 A. It's in the very lower right-hand corner called "rest of  
12 services."

13 Q. And so does this diagram show only direct costs that are  
14 being allocated to that product group or further costs beyond  
15 direct costs?

16 A. No. It has -- it has actually three classifications of  
17 how they're being spread. They're either direct, they are  
18 shared, which typically might be one or two or three products  
19 or services sharing a cost, or there's allocated where they  
20 might be being allocated across a larger swath of products and  
21 services.

22 Q. Mr. Roman testified about some specific categories of  
23 costs that he had allocated to the App Store. Does this chart  
24 depict some of those categories that Mr. Roman had allocated?

25 A. Yes. It depicts research and development, R&D, as well as

1 G&A.

2 Q. And just to make sure we're clear and our record is clear,  
3 are the allocations depicted in this diagram different from  
4 those that Mr. Roman used when he put together his price  
5 committee deck?

6 A. Materially.

7 Q. And in your opinion as an accountant and a forensic  
8 accountant, would it be at all reasonable for Mr. Cook or  
9 Mr. Maestri or Mr. Schiller to rely or base any business  
10 decisions on the profit margin percentages that are presented  
11 by Mr. Roman?

12 A. No. They're not -- they're not accurate or reliable.

13 MR. BYARS: Thank you. I'll pass the witness, Your  
14 Honor.

15 THE COURT: All right.

16 Exam?

17 MR. PERRY: Me again, Your Honor.

18 THE COURT: Mr. Perry.

19 **CROSS-EXAMINATION**

20 BY MR. PERRY:

21 Q. Good afternoon, Mr. Barnes.

22 A. Good afternoon, Mr. Perry.

23 Q. You're a CPA, right?

24 A. Yes, sir.

25 Q. Forensic accountant, correct?



1 A. Yes, sir.

2 Q. You say in your declaration that you based your opinions  
3 that you've just explained today on your previous analysis in  
4 this case, right?

5 A. In my declaration, in large part that was the case,  
6 correct.

7 Q. In your declaration, right. Because today you offered  
8 some new opinions that are not in your declaration, right?

9 A. I believe I offered some opinions in response to  
10 Mr. Roman's testimony, yes.

11 Q. And they're not in your declaration, just to be clear?

12 A. Correct.

13 Q. Okay. So we'll get to that.

14 But are those opinions also based on your prior analysis?

15 A. In part, but they would be based on my further analysis of  
16 what Mr. Roman testified to today.

17 Q. The further analysis in the last six minutes.

18 A. Correct.

19 Q. Okay. And is that consistent with your prior work in this  
20 case and analysis?

21 A. Yes.

22 Q. Okay. And that analysis was set forth in an expert report  
23 that you filed or served on February 16th, 2021. Do you  
24 recall that?

25 A. I don't recall the specific dates, but I did submit an

1 expert report in this case, yes.

2 Q. You remember that. Okay.

3 And you also submitted written direct testimony in this  
4 case. You remember that, right?

5 A. I did.

6 Q. And you were deposed in this case on March 26, 2021. You  
7 remember that, right?

8 A. I remember being deposed. I don't recall the date.

9 Q. Take my word for it?

10 A. I do.

11 Q. Okay. And you testified in the trial in this case, right?

12 A. I did.

13 Q. If I tell you May 14th, 2021, which was roughly almost  
14 exactly three years ago, would you -- would you go along with  
15 me, Mr. Barnes?

16 A. I absolutely would.

17 Q. Okay.

18 Now, your previous analysis on which your current  
19 opinions, I take it, are -- are based, right, it's consistent  
20 with, was solely in an accounting context, accounting  
21 profitability under GAAP. Do you recall that?

22 A. I -- I'm sure -- yes, I analyze financial and business  
23 records from an accounting standpoint. That's my expertise.  
24 So that wouldn't surprise me that I would have characterized  
25 it that way.

1 Q. Okay. Accounting context, accounting profitability under  
2 GAAP. That was your testimony, that was your analysis then,  
3 and it's your testimony today in fact, right?

4 A. I don't disagree with that.

5 Q. Okay. In your previous analysis when you mentioned you  
6 viewed many Apple -- excuse me -- P&L's. You recall that  
7 testimony at trial, right, that you gave?

8 A. I do.

9 Q. And in the report that you filed, your original report,  
10 that was largely based on two Apple documents, right? Do you  
11 remember that?

12 A. There were two documents that were certainly exemplary of  
13 many other documents, but there were two that I focused on in  
14 presenting the data, yes.

15 Q. Two that you focused on. Fiscal year, 1920, business  
16 planning documents. And if I tell you the exhibit numbers,  
17 are you going to remember them from three years ago,  
18 Mr. Barnes?

19 A. I'm not. Sorry.

20 Q. I'm going to say them anyway.

21 A. Okay.

22 Q. PX-208. Excuse me. PX-602 and PX-608. You don't  
23 remember those, right? But will you take my word for that?

24 A. I have a fairly good recollection of the documents  
25 themselves. I don't -- but I take your word for the document,

1 for the exhibit numbers.

2 Q. We can pull them out and show them to you, but maybe it  
3 would be better to move along.

4 A. It's your call.

5 Q. Okay. Thank you, sir.

6 And then after you filed your report and before your  
7 deposition, you came up with some supplemental opinions based  
8 on some more recently produced documents. Do you remember  
9 that?

10 A. I do.

11 Q. And there were three of those documents that you primarily  
12 relied on, right? Do you remember that?

13 A. I recall primarily relying on one, but perhaps there were  
14 two others.

15 Q. Okay. You testified about three. And, yes, you jumped  
16 ahead to my next question, sir. I appreciate that. You  
17 primarily testified about one which was the fiscal year '20,  
18 products and services, profitability deck, that you included  
19 three slides from your demonstratives, right?

20 A. I believe so, yes.

21 Q. Okay. And that's the one that you talked about today in  
22 your testimony, right?

23 A. It is.

24 Q. And that, you're aware, was prepared by Apple's corporate  
25 FP&A group, right?

1 A. It was.

2 Q. Okay. And that was -- if we could look at your  
3 demonstrative .5, what year is that for?

4 A. (Reviewing document.) .5.

5 Q. 184.5.

6 A. Yeah, 184.5, this was -- it was I believe prepared in  
7 2019. It was looking forward to fiscal year 2020.

8 Q. So four or five years ago.

9 A. Correct.

10 Q. Okay. And you've not looked at any more recent internal  
11 Apple financial documents since then, right?

12 A. No. I'm not aware that there's any available for my  
13 review.

14 Q. And the only thing you submitted with your declaration and  
15 you talked about today that's more recent, that's even  
16 remotely recent, is the 10-K that was filed with the SEC,  
17 right, for fiscal year '23?

18 A. That's correct.

19 Q. Okay. Now, none of the documents -- certainly none of the  
20 five documents on which you primarily relied, were price  
21 committee decks or presentations, right?

22 A. Other than what Mr. Roman presented, that's correct.

23 Q. In fact, of all the documents cited in your report and  
24 discussed at your deposition and cited in your written direct  
25 testimony, there is not one price committee deck, right?

1       **A.** Not that I recall.

2       **Q.** And you've never analyzed for purposes of this case a  
3 price committee deck, correct?

4       **A.** I don't have a recollection, I can't foreclose -- I can't  
5 foreclose the possibility that there was not something in the  
6 production that I reviewed in this case --

7       **Q.** That's fair. That's fair. And in fact, in your expert  
8 report, you have a list of materials relied on, right?

9       **A.** I believe so. The Federal Rules require that.

10      **Q.** Right. So everybody knows. And there's no price  
11 committee decks in there, right?

12      **A.** I don't know that --

13                               (Simultaneous colloquy.)

14                               (Off-the-record discussion.)

15               **THE COURT:** Oh, so I get it. He didn't look at a  
16 price committee report. Why don't you move on?

17               **MR. PERRY:** Thank you, Your Honor.

18      **Q.** Your declaration in this proceeding, moving forward three  
19 years now, Mr. Barnes, is in response primarily to  
20 Mr. Barnes' -- excuse me -- Mr. Roman's declaration, right?

21      **A.** That is correct.

22      **Q.** And then as you just mentioned, you've added some new  
23 opinions in the last six minutes in response to his testimony,  
24 right?

25      **A.** I'm not sure I agree with the six minutes but --

1 Q. Okay. Twenty -- 21 minutes. I apologize.

2 A. Okay. He was on the stand since 12:00 o'clock so...

3 Q. I know, but you just offered them in the last 21 minutes,  
4 right?

5 A. Oh, absolutely.

6 Q. Okay. Now, you reviewed Mr. Roman's entire declaration,  
7 right?

8 A. I did read the entire thing, yes.

9 Q. But you don't address the entire declaration in your  
10 report.

11 A. No. I focused on the issues within his declaration that  
12 were within my area of expertise which had to do with the  
13 profitability analysis.

14 Q. Okay. And just so we're clear on what you are and aren't  
15 disagreeing with, let's go to Mr. Roman's declaration.

16 And I believe it's in the binder counsel already gave you,  
17 but I just need to grab it.

18 Do you see CX-1021.020, Mr. Barnes, in that?

19 A. Yes, sir.

20 Q. That's Mr. Roman's declaration that you're responding to,  
21 right?

22 A. Yes, it is.

23 Q. And you reviewed this in your professional capacity?

24 A. I did.

25 Q. And you wrote a declaration responding to it, right?

1       **A.** I did.

2               **MR. PERRY:** Your Honor, I move the admission of  
3 CX-1020.

4               **MR. BYARS:** Objection, Your Honor.

5               **THE COURT:** His declaration?

6               **MR. PERRY:** No. Mr. Roman's declaration that he's  
7 offering his opinions on.

8               **THE COURT:** Okay. It's hearsay.

9               **MR. PERRY:** It is?

10              **THE COURT:** So the answer would be no.

11              **MR. PERRY:** Okay, Your Honor.

12              **THE COURT:** I mean, why do I need the declaration? I  
13 mean it's part -- I'm considering it. It's part of the  
14 docket.

15              **MR. PERRY:** Yes, Your Honor. It is the motions  
16 hearing. Hearsay is a valid objection, but not the same as at  
17 trial. It is hearsay, but it is the hearsay on which he based  
18 his declaration.

19              It doesn't --

20              **THE COURT:** Just ask him questions.

21              **MR. PERRY:** Thank you, Your Honor.

22       **Q.** You focused not on the front half, if you will, of the  
23 declaration.

24       **A.** I don't really have it committed to memory as far as front  
25 half and back half. But as I mentioned, I focused on his



1 discussion of profitability issues which is within my area of  
2 expertise.

3 Q. And just to help you out, Mr. Barnes, on page CX-1020-6,  
4 it's in the bottom right corner.

5 A. (Reviewing document.)

6 Q. Do you see the heading "Apple estimated the App Store  
7 ecosystems indicative profits and losses as well as effective  
8 commission on entitlement transactions"?

9 A. I see that title.

10 Q. And then there are paragraphs 21 through 28 in that  
11 section.

12 A. I see that.

13 Q. You agree with me that that's the part of the Mr. Roman's  
14 declaration you're responding to?

15 A. Principally, along with the exhibit that we referenced  
16 earlier.

17 Q. And the exhibit that we -- that was referenced earlier is  
18 the price committee deck that Mr. Roman testified about,  
19 correct?

20 A. Yes, sir.

21 Q. Okay.

22 And in the price committee deck, you discussed with  
23 Mr. Byars primarily the indicative P&L slide, right?

24 A. The indicative P&L slide and the slides related to the  
25 allocation of R&D and G&A.

1 Q. The following slide?

2 A. Correct.

3 Q. Thank you.

4 All right. Now you're not actually making any opinions as  
5 a CPA and forensic accountant regarding Mr. Roman's  
6 credibility, right?

7 A. I'm not assessing his -- I'm not here to assess anyone's  
8 credibility. I'm analyzing his work product.

9 Q. Okay. And the work product is you first criticized his  
10 statement that Apple does not have a fully burdened P&L for  
11 the App Store; is that right?

12 A. That they don't -- that they can't and do not maintain  
13 one, correct.

14 Q. And your criticism really is that you were able to  
15 reverse-engineer such a document for the purpose of the trial  
16 and therefore Mr. Roman is wrong now in 2024 about what exists  
17 within Apple; is that about it?

18 A. That's not the entirety of it. I also was able to  
19 identify within Apple's own ordinary course business documents  
20 that they maintain and report to the highest levels in the  
21 company an App Store P&L, and the Court agreed with me.

22 Q. Absolutely. I was asking a different question.

23 The App Store P&L's that you identified and that were sent  
24 to the highest levels of the company are not fully burdened,  
25 right?

1       **A.** That's -- that's incorrect.

2       **Q.** What you had to do, you said -- you testified earlier a  
3       reconciliation. You said you could reconcile them to the SEC  
4       filings, right?

5       **A.** I was able to reconcile the CF&P document to the -- to the  
6       SEC filings.

7       **Q.** You had to make some adjustments to do that, right?

8       **A.** I did not.

9       **Q.** Okay.

10           And that's what the Court referred to as  
11       reverse-engineering in the Court's opinion. Do you recall  
12       that?

13       **A.** That was with respect to two other App Store P&L's that  
14       were maintained that Mr. Rollins from Apple had indicated that  
15       he thought there might be some certain minor cost calculations  
16       that had not been reflected. So I attempted to account for  
17       his testimony.

18       **Q.** So you adjusted those.

19       **A.** I did.

20       **Q.** And specifically you adjusted the allocation methodology  
21       for G&A and R&D, right?

22       **A.** That may be true. I don't have a specific recollection.  
23       I'd have to go back and look at my work product from back  
24       then.

25       **Q.** Okay.

1 Now, one of the reasons you relied on the documents that  
2 you've identified, the App Store, P&L's, is that they were  
3 communicated to the highest levels of the C suite. I think  
4 you just said that, right?

5 **A.** Yes.

6 **Q.** And you think it's important that if Apple financial  
7 professionals communicate a document to senior executives, it  
8 is entitled to some weight, right?

9 **A.** Certainly. And certain -- sometimes to the board of  
10 directors as well.

11 **Q.** Okay. Now, the Court's finding regarding fully burdened  
12 P&L's was based on documents, as you just testified, I  
13 believe, prepared by Apple's corporate FP&A group, right? Do  
14 you remember that?

15 **A.** That question might be better asked to the Court. I -- my  
16 recollection is that the Court's finding was based on my  
17 testimony.

18 **Q.** Well, you were here for Mr. Roman's testimony just a few  
19 minutes ago, right?

20 **A.** Yes.

21 **Q.** And I read to him the Court's statement -- I'll read for  
22 you too, Mr. Barnes.

23 Apple's financial planning and analysis team are tracking  
24 revenues, fixed and variable operating costs, and allocation  
25 of IT, research and development, and corporate overheads to an

1 App Store P&L statement.

2 Do you remember that finding by the Court?

3 **A.** Yes. I don't think that references the question you asked  
4 me just a minute ago.

5 **Q.** My question was: Were the documents that you relied on  
6 prepared by Apple's corporate FP&A team?

7 **A.** One of them was, yes.

8 **Q.** Yes. The one that you said didn't require an adjustment,  
9 right?

10 **A.** Correct.

11 **Q.** And Mr. Roman testified that that reference in the Court's  
12 opinion is to the corporate FP&A team, right?

13 **A.** I'm not following you, sir. I don't know --

14 **Q.** I'm just asking you very simple question.

15 **A.** Okay.

16 **Q.** The one document, PX-2385 that you referred to in the  
17 demonstrative you talked about 26 minutes ago, was prepared by  
18 Apple's corporate FP&A team, correct?

19 **A.** Yes, it was.

20 **Q.** Okay. Thank you.

21 Now, the point of that prior testimony, of your prior  
22 testimony, was that Apple has, on occasion, and you've offered  
23 up this chart on CDX-184.5, created a P&L for the App Store  
24 that allocates joint fixed or shared costs, depending on  
25 how -- terminology you prefer, two various business lines

1 including the App Store, right?

2 **A.** Yes. That document and several others that I testified to  
3 at trial.

4 **Q.** Right. Okay.

5 Now, Mr. Roman's estimated or indicative P&L also  
6 allocates joint costs to the App Store, right?

7 **A.** It purports to, yes.

8 **Q.** It purports to.

9 And the new opinion you've offered today is that that  
10 allocation is incorrect.

11 **A.** It's inconsistent with my prior investigation and work in  
12 this case.

13 **Q.** Okay. It's inconsistent with your prior investigation and  
14 work in this case.

15 **A.** Correct.

16 **Q.** And what part of your prior investigation and work in this  
17 case is it inconsistent with?

18 **A.** My review and analysis of other App Store P&L's including  
19 the corporate finance and planning version that document the  
20 amount of allocated R&D and allocated G&A that go to the  
21 App Store.

22 **Q.** Okay. So let's just make sure I've got this right.

23 It uses a different allocation than the document included  
24 on CDX-184.5. Is that your opinion?

25 **A.** Mr. Roman's allocations allocate materially higher amounts

1 of R&D and G&A than do all of the other individual App Store  
2 P&L's that I reviewed, including that one.

3 Q. All of the other?

4 A. Yes.

5 Q. And where have you set forth that analysis?

6 A. It's in my trial testimony.

7 Q. Your trial testimony could not have referred to  
8 Mr. Roman's indicative P&L that he prepared in the fall of  
9 2023 and presented to the price committee to make a decision  
10 in January of 2024, could it, Mr. Barnes?

11 A. No, it could not.

12 Q. Okay. Where have you set forth the analysis that  
13 Mr. Roman's indicative P&L has a materially higher allocation  
14 of R&D and G&A than any document that you reviewed in this  
15 case?

16 A. Because I know the numbers. And I -- I don't think I'm  
17 allowed to say the numbers out loud.

18 Q. Okay. I didn't ask you that question.

19 Where have you set forth the analysis?

20 A. The analysis is that I did the work, I have the -- I know  
21 what they actually do in the ordinary course of business. I  
22 can compare those numbers to what Mr. Roman has advanced here.  
23 And what Mr. Roman has advanced here is materially higher.  
24 That's an analysis that's -- it's in my head.

25 Q. Okay. When did -- oh, it's in your head. Have you ever

1 written it down?

2 **A.** I believe I did write it down in my declaration.

3 **Q.** Oh, you did. Okay, let's look at that.

4 **A.** Okay.

5 **THE COURT:** How much longer are you going to go,  
6 Mr. Perry?

7 **MR. PERRY:** A fair bit, Your Honor.

8 **THE COURT:** All right. Then we'll go ahead and  
9 recess for the day.

10 Mr. Barnes, you are under cross-examination. You are  
11 ordered not to have any discussions with the lawyers at this  
12 juncture until you're released. Do you understand?

13 **THE WITNESS:** Yes, Your Honor.

14 **THE COURT:** Okay.

15 I will see everybody again. We'll stand in recess until  
16 May 16th at 9:30.

17 Thank you.

18 **THE CLERK:** Court is in recess.

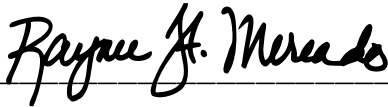
19 (Proceedings were concluded at 4:32 P.M.)

20 --o0o--



**CERTIFICATE OF REPORTER**

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. I further certify that I am neither counsel for, related to, nor employed by any of the parties to the action in which this hearing was taken, and further that I am not financially nor otherwise interested in the outcome of the action.



Raynee H. Mercado, CSR, RMR, CRR, FCRR, CCRR

Friday, May 10, 2024